

Public Utilities

FORTNIGHTLY



Volume XLIII No. 3

February 3, 1949

AN ADJUSTMENT CLAUSE FOR TAXES

By W. Truslow Hyde, Jr.

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Public Utility Statistics As Business Signs

By Herbert Bratter

< >

The Air-line Regulation Crux

By Selig Altschul

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Thomas Edison's 102 Years

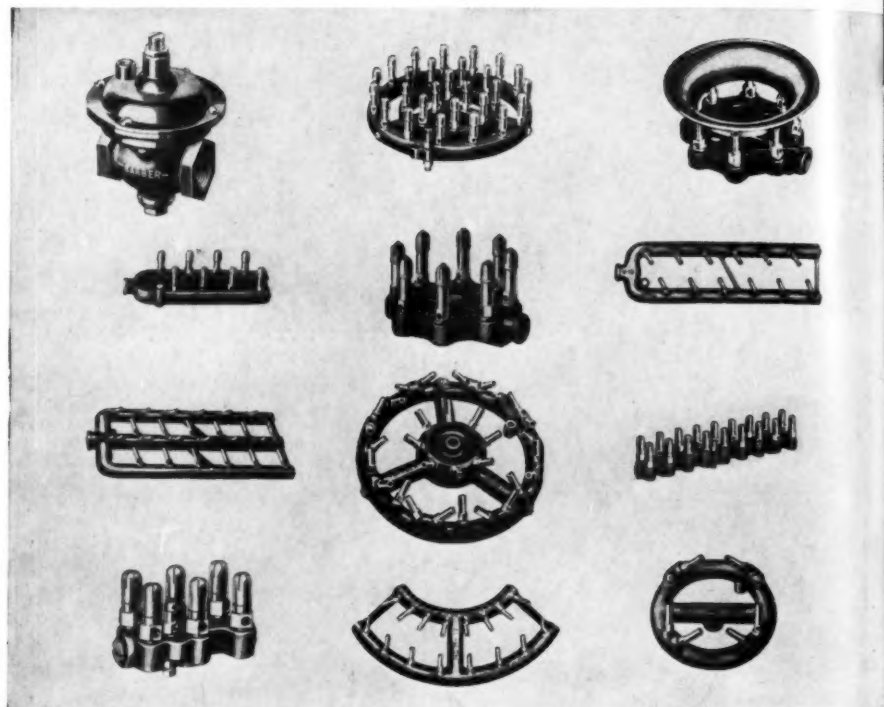
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Public Utilities

FORTNIGHTLY

VOLUME XLIII

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ARTICLES

An Adjustment Clause for Taxes	<i>W. Truslow Hyde, Jr.</i>	135
Public Utility Statistics As Business Signs	<i>Herbert Bratter</i>	140
The Air-line Regulation Crux	<i>Selig Altschul</i>	147
Thomas Edison's 102 Years	<i>John C. F. Coakley</i>	156

FEATURE SECTIONS

Washington and the Utilities	160
Exchange Calls and Gossip	163
Financial News and Comment	<i>Owen Ely</i> 166
What Others Think	174
The March of Events	184
Progress of Regulation	191
Public Utilities Reports (Selected Preprints of Cases)	198

• Pages with the Editors	6	• Remarkable Remarks	12
• Utilities Almanack	133	• Frontispiece	134
• Industrial Progress	21	• Index to Advertisers'	36

PUBLIC UTILITIES FORTNIGHTLY . .
stands for Federal and state regulation of both privately owned and operated utilities and publicly owned and operated utilities, on a fair and nondiscriminatory basis; for nondiscriminatory administration of laws; for equitable and nondiscriminatory taxation; and, in general—for the perpetuation of the free enterprise system. It is an open forum for the free expression of opinion concerning public utility regulation and allied topics. It is supported by subscription and advertising revenue; it is not the mouthpiece of any group or faction; it is not under the editorial supervision of, nor does it bear the endorsement of, any organization or association. The editors do not assume responsibility for the opinions expressed by its contributors.

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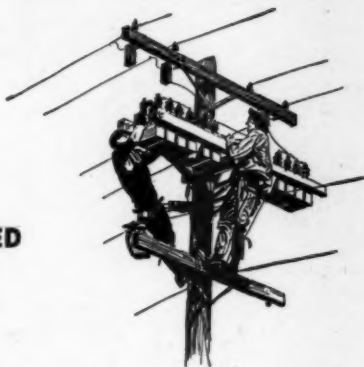
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Pages with the Editors

THE recent messages of President Truman to the Congress on the "state of the Union," and more particularly on the budget, indicate the possible need for new thinking in the business community on the future rôle of government. Truman's program constitutes an unblushing departure from the Federal government as simply an operator of traditional government services and an umpire of private business operations in a regulatory sort of way.

UNDER the new Truman pattern the Federal government would necessarily become bigger, more powerful, render more services to more people. It would not only govern the whole national economy and take over many of the planning and supervisory functions which used to be left to industrial management, professional judgment, private charities, and others. It also threatens government competition with steel, copper, and other basic industries along the lines already familiar under the so-called "yardstick" concept which launched the Tennessee Valley Authority into the electric power business. As the opening wedge, this appears merely as a vague threat of direct government action, to be taken only if

private industry cannot solve its production and shortage problems to the satisfaction of the government.

WHETHER or not Congress will accept a major part of these recommendations, one thing is certain: The Truman program means more taxes, more spending, and more benefits for more people, administered by the Federal government. That being the case, it would appear that private industry must, in self-defense, take steps to awaken the public consciousness on the subject of who is going to pay for this; namely, more education on the tax burden.

IT is only being realistic to admit that a great proportion of our population approves of the idea of government aid and government spending, because for them it appears to be free. And for a good many of our lower income people it probably is free, in the sense that they get more benefits than they pay for, as individual taxpayers. But too often the illusion of "free" government benefits places the government in the false and unfair rôle of an outright Santa Claus while private industry is cast in the rôle of old Scrooge.

THE true fact is that the Federal government has no mysterious source of revenue but must obtain every penny from tax-paying business or individual income. This truth is often lost on the humble citizen in his awe over the marvelous benefits depicted for him by political administrators of such benefits. Next to repetitious publicity, perhaps one of the best devices for alerting the general citizenry on the subject of who is really paying for what, in the tax department, is the earmarking for taxes of charges which he must pay for his own goods and service supply, out of his own pocket.

IN the utility business, not all public utilities have the opportunity, such as the telephone industry, of setting forth



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SELIG ALTSCHUL

the exact amount of excise taxes separately and clearly on the monthly bill for exchange service and toll calls.

BUT if utility rates, as a whole, could be tied to some adjustment for taxes just as they already are tied to adjustment for other expenses such as coal costs, the utility company could get more or less automatic relief through rates for any addition in its out-of-pocket expenditures for taxes. More than that the utility's customers would sit up and take notice that the utility's tax burden was indeed their own tax burden.

W. TRUSLOW HYDE, JR., whose article on "An Adjustment Clause for Taxes" opens this issue, is well known in Wall Street financial circles as a specialist in utility securities. He has been associated with Josephthal & Co. since 1932. He has lectured on utilities at the New York Institute of Finance, and has given considerable time to studying and testifying before House and Senate committees in connection with utility taxation.

* * * *

AN interesting by-product of utility operations is the fact that they are tied in so closely with the general economic and business pattern of their service area. A 24-hour load chart of the average electric utility is, when rightly interpreted, a veritable gauge of the habits and customs of community life. From the morning peak to the evening

FEB. 3, 1949

drop, the load line traces the activity of the working day through every hour of the clock.

CONSUMPTION figures of power have long been regarded as a most valuable index of industrial activity. The rate of connections and disconnections of telephones and other utility services has assumed a special significance for the business economist. HERBERT BRATTER, of Washington, D. C., whose articles on business and economics have previously appeared in this publication, has made an intensive study of the relationship between these utility statistics and business operations generally in his article which begins on page 140.

* * * *

SELIG ALTSCHUL, whose article on regulation of air carriers begins on page 147, is an aviation consultant to independent financial groups and transportation interests. He also contributes regularly on aviation to national magazines and publications, notably *Aviation*, *Barron's*, and *Chicago Sun*. He is a graduate of Northwestern University, now living in New York.

* * * *

JOHN C. F. COAKLEY, whose article on Edison's birthday observance begins on page 156, is at present the historian of Edison Pioneers. MR. COAKLEY was employed by Mr. Edison from the time of his graduation from Boston University in 1925 to the date of the inventor's death in 1931. He was subsequently director of the Edison Memorial building at the Chicago exposition "Century of Progress," and has since then been active in the general practice of public relations in New York city. MR. COAKLEY recently directed the Thomas A. Edison centennial observance and is one of the collaborators on the study of Edison's inventive technique, which is being conducted by the Thomas Alva Edison Foundation.

THE next number of this magazine will be out February 17th.

The Editors

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Coming IN THE NEXT ISSUE



PUBLIC UTILITY INVESTORS DESERVE A SQUARE DEAL

Politicians customarily worry about the consumer and the rights of labor, but their general attitude about the investor seems to be that the investor can take care of himself. Dr. Willford I. King, professor emeritus of New York University and industrial economist, has prepared an original analysis of the treatment given public utility investors under prevailing regulatory procedures.

AN EDITOR LOOKS AT THE EMPLOYEE MAGAZINE

Is an employee magazine really worth the chips? If so, how can the employer go about developing the best potential from the standpoint of both the employee and management interest? J. Oliver Martin, one of the best known and most experienced editors of important utility employee magazines, gives us some honest answers to this question.

SPECIAL RATE PROBLEMS OF THE BUS-TRANSIT UTILITIES

If bus and transit companies are not subject to the same or similar economic experience as other public utilities, should their rate regulation be based on the same conventional principles of rate of return on the rate base, depreciation treatment, etc.? John F. Curtin of the nationally known Philadelphia firm of transit engineers, Simpson & Curtin, raises some fair and thought-provoking queries on this important regulatory topic.

OPEN SEASON ON VALLEY AUTHORITIES

Recently there has been an avalanche of publicity "pro and con" about valley authorities, based principally on the experience of the Tennessee Valley Authority. Gerald M. Whitright of our editorial staff has reviewed some of these documents on the occasion of TVA's fifteenth fiscal birthday.



Also . . . *Special financial news, digests, and interpretations of court and commission decisions, general news happenings, reviews, Washington gossip, and other features of interest to public utility regulators, companies, executives, financial experts, employees, investors, and others.*

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Remarkable Remarks

"There never was in the world two opinions alike."

—MONTAIGNE

LEON H. KEYSERLING
*Vice chairman, President's Council
of Economic Advisers.*

"Depressions, like wars, are man made. They don't come down from the sky."

LOWELL B. MASON
*Member, Federal Trade
Commission.*

"[Government] has its hands around the throat of American business and the power to strangle it to death."

JAMES C. OLSON
Partner, Booz, Allen & Hamilton.

"A company's organization structure is a vehicle for carrying out its objectives, policies, and programs. It should change when they change."

J. R. DAVIS
*Vice president, Ford Motor
Company.*

"I don't need to look at any surveys or polls to tell me that conditions tomorrow are going to be different than they are today. I know they will be."

L. R. BOULWARE
*Vice president, General Electric
Company.*

"Employers are beginning to see that getting and dispensing some fundamental economic education is in their own immediate enlightened self-interest."

ROBERT P. BOYLAN
*Chairman of the board, New York
Stock Exchange.*

"Any measures involving excessive taxation or a rigidly controlled economy would destroy the incentive without which our economic progress cannot continue."

CARROL M. SHANKS
*President, Prudential Insurance
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GUSTAV METZMAN
*President, New York Central
Railroad Company.*

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EDITORIAL STATEMENT
Chicago Journal of Commerce.

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January 18, 1949

REMARKABLE REMARKS—(Continued)

LEONARD J. FLETCHER
*Vice president, Caterpillar Tractor
Company.*

"The machine is the servant of this age: misunderstood in its newness, a giant in its possibilities for greater good."

EARL O. SHREVE
*President, Chamber of Commerce
of the United States.*

"The survival of America and the freedom of Western civilization depend upon the strength of the enterprise system."

EDITORIAL STATEMENT
The Wall Street Journal.

"Desirable as lower taxes undoubtedly are, this newspaper believes that it is of at least equal importance that governmental spending be reduced."

WALTER D. FULLER
*President, Curtis Publishing
Company.*

"Sell the American doctrines of success to our fellow citizens, and if either directly or through them we do an adequate sales job to the people of the world, we shall all have peace and we shall all have great and lasting prosperity."

AUSTIN S. IGLEHEART
*President, General Foods
Corporation.*

"They [the people] have the power to vote the present system and ourselves right into the ash can. Management's job, thus, is to find a better way to do things. And it must make itself and the system it represents better understood by the people it serves."

DWIGHT D. EISENHOWER
President, Columbia University.

"The truth about Communism is, today, an indispensable requirement if the true values of our democratic system are to be properly assessed. Ignorance of Communism, or Fascism, or any other police-state philosophy, is far more dangerous than ignorance of the most virulent disease."

PERCIVAL F. BRUNDAGE
*President, American Institute of
Accountants.*

"While aimed at profiteers, the [excise profits] tax actually affects them little, as they seem able to avoid it. Instead it hits, the principal industrial companies, upon whom the progress of our economy depends and a large part of whose earnings must be retained in order to maintain our free enterprise system."

RALPH ROBEY
*Economist, National Association
of Manufacturers.*

"There is nothing in the present situation which makes an economic bust inevitable. We [should] stop assuming that because we have had good business for some time, we must have a depression. Talk of a depression is nonsense. If we have one it will be because we have failed to face our problems courageously and honestly."

GORDON R. CLAPP
*Chairman, Tennessee Valley
Authority.*

"The TVA has faith in the capability of an informed mankind to evolve a harmonious and working partnership with nature. We cherish a deep conviction, born of experience, and inspired by our predecessors, that modern science, modern management, and the American tradition of human freedom can go hand in hand toward a greater abundance and a better life."

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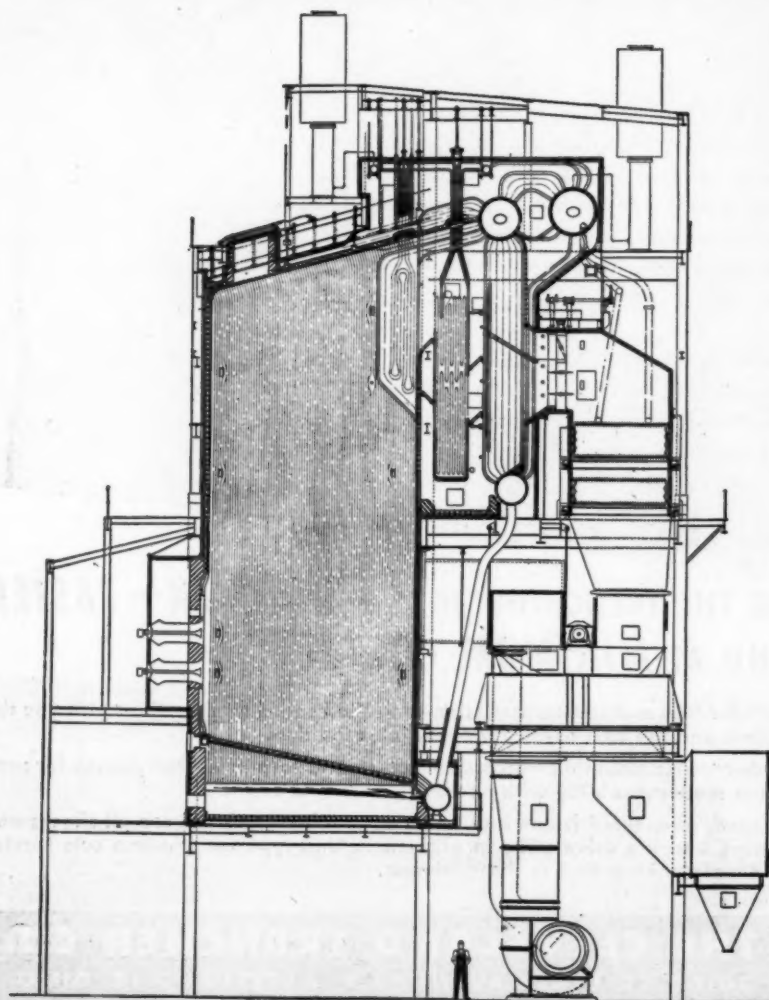
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CUTLER STEAM ELECTRIC STATION

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This unit is designed to produce, at maximum continuous capacity, 430,000 lb of steam per hr at 1350 psi and 955 F.

It is a 3-drum unit with 2-stage superheater and has a finned tube economizer and a regenerative type air heater following the boiler surface.

The furnace is completely water-cooled, using closely spaced plain tubes on side walls and finned tubes on the front wall and in the roof area. As the unit is oil fired, the water screen tubes across the furnace bottom are covered with refractory tile.

There are two other C-E Units of smaller capacity now nearing completion in this station. They, as well as the unit here described, are of the increasingly popular "outdoor" type. Another unit, duplicate of this one, is on order for the Riviera Station of the same company.

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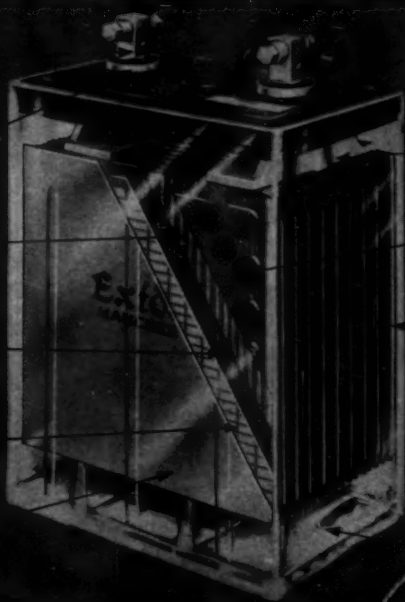
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BATTERIES

1888—Dependable Batteries for 61 Years—1949

THE ELECTRIC STORAGE BATTERY COMPANY, Philadelphia 32
Exide Batteries of Canada, Limited, Toronto

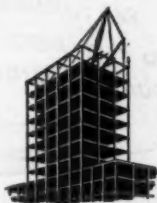
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AN ARCHITECT GOT A MONEY-MAN TO ADMIT,

"I never thought of floors in relation to earning power"

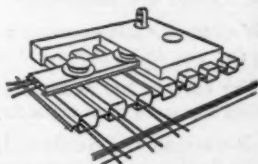


HERE'S WHAT THE ARCHITECT SHOWED



Why Q-Floor reduces building time 20 to 30%.

Q-Floor is steel subfloor, delivered pre-cut. Two men can lay 32 sq. ft. in 30 seconds. Construction is dry, incombustible. The Q-Floor is immediately used as platform by other trades. No delay for wet materials. No forms, no falsework, or fire hazard. Even when steel is slow in delivery, steel is still faster. You must allow time for demolition and excavation. By that time, the steel is ready. Steel construction gives a faster completion date. Completion time, not starting time, determines how soon your investment pays off.



Why Q-Floor keeps a building modern.

The steel cells of Q-Floor are crossed over by headers for carrying the wires of every electrical service, regardless of how many new business machines may be invented. An electrical outlet can be established on every six-inch area. It requires but a small hole, takes literally only a few minutes. No muck with trenches. Tenants can have as many outlets, changed as often and located exactly, as they please. Such permanently flexible floor plans keep a building permanently modern. The exterior may grow old-fashioned, but with live arteries of power in the floors, the building itself will never be electrically outmoded.

"Floors are such a small fraction of total cost, one tends to forget that floor space is actually what a building is for. You say a steel Q-Floor costs less than the carpet to cover it? Yet it provides electrical availability over the entire exposed area of the floor. And the steel construction, being dry, reduces building time 20 to 30%. Those are factors any investor can easily translate into terms of money saved. They mean more revenue over the years and earlier revenue right from the start. Let's look at the details—"

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Utilities Almanack



FEBRUARY



3	T ^h	† American Water Works Association, New Jersey Section, will hold annual luncheon meeting, Newark, N. J., Feb. 17, 1949.
4	F	† American Institute of Electrical Engineers ends winter general meeting, New York, N. Y., 1949.
5	S ^a	† Radio Correspondents Association begins annual dinner, Washington, D. C., 1949.
6	S	† National Association of Home Builders will hold annual convention and exposition, Chicago, Ill., Feb. 20-24, 1949. 
7	M	† American Road Builders Association begins annual meeting, Washington, D. C., 1949.
8	T ^u	† Pennsylvania Electric Association Transmission and Distribution Committee, will hold annual meeting, Philadelphia, Pa., Feb. 24, 25, 1949.
9	W	† Missouri Valley Electric Association, Sales and Rural Committee, will hold one-day meeting, Kansas City, Mo., Feb. 25, 1949.
10	T ^h	† Edison Electric Institute, Transmission and Distribution Committee, begins meeting, Cincinnati, Ohio, 1949.
11	F	† Pennsylvania Electric Association, Prime Movers Committee, ends meeting, Philadelphia, Pa., 1949.
12	S ^a	† Kentucky Independent Telephone Association will hold annual convention, Lexington, Ky., Mar. 15, 1949.
13	S	† New England Gas Association will hold annual convention, Boston, Mass., Mar. 24, 25, 1949. 
14	M	† National Association of Broadcasters begins board of directors meeting, New Orleans, La., 1949.
15	T ^u	† Edison Electric Institute, Electrical Equipment Committee, ends annual meeting, St. Louis, Mo., 1949.
16	W	† Ohio Independent Telephone Association will hold annual convention, Columbus, Ohio, Mar. 28-30, 1949.

Cutting through Michigan Deer Country

*Natural gas pipe line from Austin field to
Detroit pipe-line system.*



Courtesy, Michigan Consolidated Gas Company.

Public Utilities

FORTNIGHTLY

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FEBRUARY 3, 1949

An Adjustment Clause for Taxes

Such a provision, like fuel and other adjustment clauses, approved and used for many years in rate schedules, should, in the opinion of the author, be extended to taxes, once a minor item, but now one of the most important elements of utility service costs.

By W. TRUSLOW HYDE, JR.*

ONE of the thought-provoking results of the Truman victory is investors' reaction following in the wake of the President's anti-utility campaign. Unless steps can be taken to offset this reaction, the whole expansion program of the utility industries can be jeopardized.

As far as prospective regulation of the utilities is concerned, the election was not so decisive. The Republicans, had they been successful, might well have imposed just as onerous a brand of regulation on the utilities as the Democrats. But it is the threat of an

increasing tax burden which is scaring the investor away from utility shares, to a notable degree.

Foremost in the minds of the investing public, from whom the new equity must be obtained, is the memory of the wartime excess profits taxes. Although there is no present certainty that taxes will be changed by the 81st Congress, the fear of a repetition of the wartime pattern of declining net income, resulting from the impact of taxes, could well discourage the sale of additional common stock pending clarification of the tax structure. That is, unless countermeasures were taken.

Fortunately, there is such a counter-

*For personal note, see "Pages with the Editors."

PUBLIC UTILITIES FORTNIGHTLY

measure, and a most effective one, ready at hand. Assuming the coöperation of the state regulatory commissions, the utilities can overcome this obstacle to their financing program by adopting a clear and unequivocal policy. This policy would be based on the proposition that because present rates are predicated on a 38 per cent combined income and surtax, therefore any change from this level must be offset by a surcharge or rebate at the end of the year.

income adjustment
at shift

THE perennial objection widely believed by investors, that the fixed and regulated rates of utilities will make it impossible to absorb or pass on an unknown tax burden, makes it imperative that some such assurances be given. Otherwise the situation contains a serious threat to the continuity of earnings and dividends and will continue to militate against public acceptance of utility stocks. The argument that regulatory commissions are required to permit rates which will produce a fair return is not a satisfactory answer to a question raised by a tax which is still only a potential increase in costs.

Time lag

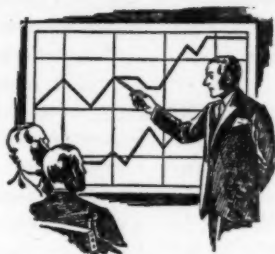
No matter how veiled the threat, investors know from experience that present regulatory procedure—perhaps as a practical necessity—is time consuming. Nevertheless, they cannot be expected to make commitments without assurance that some form of prompt relief can be obtained. Even in the speediest decisions, several months are required to complete the legal formalities which are a prerequisite for higher billings. In other cases rulings are delayed indefinitely. Consolidated Edison of New York re-

quested an increase in gas rates in October, 1946. The commission's decision was not handed down until more than two years later, and then accompanied by an order for a much larger decrease in electric rates. Georgia Power Company asked for an emergency rate increase early in 1948 but no action was taken by the commission until November. Even in cases where relatively prompt rate increases have been granted, they have proved too little and too late.

Although the commissions have the immediate responsibility for these delays, management has its part to play. For example, utility officials often hesitate to request rate increases necessary to cover higher future costs. Since management is able to project earnings over a period of five years, as is frequently done before the SEC, and budget construction programs and capital requirements far into the future (as must be done to maintain adequate facilities), it is difficult to understand why management cannot also be permitted to anticipate operating costs six months, or a year, in advance. Knowing the delays which inevitably accompany rate proceedings, the investor has grown skeptical of management's policy of waiting for adverse changes in operating conditions to be reflected in unfavorable earnings, before summoning sufficient fortitude to ask for rate relief.

UNFORTUNATELY such procedure is like going down a one-way street. In the past two years, with or without regulatory pressure, managements have moved quickly to cut back temporarily flush earnings through rate reductions or rebates to customers at

AN ADJUSTMENT CLAUSE FOR TAXES



Fear of Higher Taxes

“UNLESS utility officials meet the present fear of higher taxes, whether or not they materialize and regardless of what form they take, there is serious danger that the investor will refuse to invest his money in utility stocks. During the past two years most managements have pursued a program to improve stockholder relations. This is a forward step.”

the end of the year. The president of one utility whose earnings have declined to a point which jeopardizes its financing ability told this writer that a rate increase at the present time might prove embarrassing a year or two from now when earnings reflected the benefits of its new plants and continued increases in demand.

Furthermore, he added, higher rates could not be obtained for a year, by which time earnings' projections indicated that an increase might not be necessary. He also considered the alternative of a temporary surcharge, inadvisable even though the company granted substantial discounts and rebates in recent years when earnings represented an excessive return. It would seem only reasonable to contend that what is sauce for the investor goose is sauce for the customer gander. If consumers are to reap the benefits

of temporarily high earnings, should they not expect to make up any temporary deficiency? Otherwise, stockholders would seem entitled to receive the flush earnings to compensate for periods when earnings were inadequate.

Unless utility officials meet the present fear of higher taxes, whether or not they materialize and regardless of what form they take, there is serious danger that the investor will refuse to invest his money in utility stocks. During the past two years most managements have pursued a program to improve stockholder relations. This is a forward step. It has been well received by the investing public; but it might well be accompanied by a positive program to instill sufficient confidence to overcome the inelasticity of regulation, with respect to fixed rates, which has become such a handicap for

PUBLIC UTILITIES FORTNIGHTLY

utility stocks. Justification for this attitude must be considered in the light of the performance by utilities with respect to promises to the investor.

ALTHOUGH it is always more difficult to contend with the unknown than the known, the utilities can take affirmative action to protect themselves against the possibility of a change in taxes, if they expect the public to invest more money in their stocks. Anticipation of the eventuality of higher taxes is necessary to assure continuation of dividends to present stockholders. Legally, of course, coöperation of the regulatory authorities must also be sought and enlisted.

Right now, probably, nothing could create greater investor confidence in utility stocks than immediate official requests by the companies to regulatory authorities, throughout the country, for permission to adjust rates to offset *any changes, either up or down*, in Federal taxes irrespective of other factors or rate considerations. This would not necessitate any change in rate schedules. It could be accomplished by a percentage surcharge or rebate to offset the effects of changes in taxes.

Furthermore, such adjustments might be made retroactive to the effective date of the tax change, in order to avoid any lag in earnings which might temporarily affect the continuity of dividends.

Granted, some objection will be made that such a procedure is too radical a departure from orthodox rate-making procedure, because it is predicated on unpredictable future developments. On closer analysis, however, it plainly appears to be only an

extension of the principle of fuel adjustment and other inflationary clauses which have been used in utility rates for many years. All of these clauses provide a means for automatic adjustment of rates to compensate for unknown future fluctuations in specific costs. Why should they not be extended to taxes which, although once a minor item, are now one of the most important elements of costs? It would not only stabilize earnings and improve the credit of utilities; it would also avoid the necessity of frequent changes in basic rates, which might be then considered entirely fair and adequate on the basis of a 38 per cent normal and surtax. These same rates could become grossly inadequate and confiscatory if these taxes were increased or supplemented by an excess profits tax without any corresponding rate adjustment.

To be successful, full coöperation of regulatory authorities with such a program is essential. Even though management indicates its intentions to anticipate possible changes in taxes, investor confidence in utility stocks would not be restored unless the commissions also adopted a realistic approach and granted the principle of the adjustments, subject only to later approval of their form when the full effects of any tax changes in a particular year are known. It is, moreover, important to commissions that the utilities maintain their credit and obtain additional equity. It is their legal responsibility to authorize adequate rates. They stand to receive criticism by the public if private utilities are unable to provide for rapidly growing demand. The result of a fail-

AN ADJUSTMENT CLAUSE FOR TAXES

ure of private companies to meet their public obligations might easily be an acknowledgement of the failure of regulation and a revival of pressure for municipal ownership.

The argument that the present weakness in public utility stocks is due entirely to emotional fear of punitive action which may never materialize is not only unsound but somewhat naïve. This weak condition, after all, is a fact. Whether or not the weakness is justified, it is with us and, so long as it lasts, equity financing will be most difficult. It will require some months for Congress to determine the final 1949 tax law, during which time equity financing will be stymied unless the fear of the effect of onerous taxation is eliminated by prompt action by management and equally prompt coöperation by regulatory commissions. On the other hand, if this is done, investor

confidence in utility securities should return. Then necessary and vital financing can proceed.

In a crisis such as the utilities will be facing over the next six to nine months, minor controversies should be put aside and all interested parties should coöperate to accomplish a successful conclusion of mutual benefit. The present challenge, if successfully met through coöperative effort, could be turned into a golden opportunity for both managements and regulatory agencies to convince the investing public that the business-managed utility industry can, and will, adjust its operations to meet whatever conditions lie ahead and that, while it will continue to provide the best possible service at the lowest possible price, it will not do so at the expense of stockholders whose savings have been entrusted to its care.



"INFLATION is a product of a number of economic forces. Inflation reflects the tripling of the money supply of the United States during the war years. It is aggravated by shortages of goods and of homes created during the war, when so much of America's productive capacity was diverted to the making of munitions and by farm price supports. It is furthered by labor union policies seeking wage increases that do not correspond to gains in productivity of labor. It is intensified by heavier government spending.

"Public thinking about this most vital issue can go astray if the manifold causes of inflation are ignored, so that people come to believe that they can halt the rise in commodity prices simply and easily by some single, painless step."

—EDITORIAL STATEMENT,
The Journal of Commerce.



Public Utility Statistics As Business Signs

Production of electric energy and other utility service figures considered and their significance in the national business picture discussed.

By HERBERT BRATTER*

MOST collections of statistics offered as business indicators include data on public utilities, such as the production or consumption of electric power and gas, the number of telephone stations or phone calls originated, passengers carried on street railways or bus lines, and the like. Such figures are commonly offered in monthly bulletins of chambers of commerce and in local newspapers. They may be used in a variety of ways. One may be interested in the national business outlook in its entirety or as it affects his locality or particular line of business. Or one may be watching the business situation in a given city or community. For such purposes public utility statistics have their uses, provided they are intelligently employed.

*Economist and author of articles on banking and international finance, Washington, D. C. See, also, "Pages with the Editors."

I *Nation-wide Data*

LET us consider first electric energy produced and its significance in the national business picture. The first thing to bear in mind is that the ever-increasing mechanization of industry in the United States leads to an upward bias in the ratio of electric energy used to industrial production, over the long run. In the shorter run, however, there seems to be a fairly close relationship between the total consumption of electricity and total industrial production in factory and mine. This being so, there is an advantage in having the figures for electric energy produced by the electric light and power industry available each week from the Edison Electric Institute; for the Federal Reserve Board's index of industrial production comes out only once a month.

PUBLIC UTILITY STATISTICS AS BUSINESS SIGNS

Moreover, the weekly kilowatt-hour statistics which the institute publishes for the nation as a whole are supplemented by percentage changes in electric energy production week by week in each of the seven regions comprising the country (New England, Middle Atlantic, etc.).

Against the advantage of regional breakdown and more frequent periodicity, however, the business student will note the fact that the Federal Reserve Board's index of industrial production is adjusted for seasonal variation; moreover, that the institute's electric-energy data include not only industrial, but all other users, as reflected in the production of electricity. For analytical use the statistics should be broken down as much as possible.

DURING the war the Federal Power Commission made some correlation studies for various leading industries, comparing the use of electric energy with the product of those different industries and with the Bureau of Labor Statistics' index of man-hours in industry. In most industries studied by the FPC the correlation was striking; but in some the divergence of the curves was considerable. Thus, in wartime shipbuilding, we find that the consumption of electricity was disproportionate to the tonnage produced in the shipyards, reflecting the switch to electric welding and the employment of many unskilled workers. Aluminum production is an industry which uses an enormous amount of electricity per unit of production, when compared with other industries. This was reflected in the FPC's studies.

Those persons making long-term studies with the help of electric-energy

data must also be on the lookout for large industries shifting to or from the use of electricity, since such shifts may affect the conclusions drawn.

For the most part, seasonal variations in the consumption of electric energy are accounted for by commercial and residential users, rather than industrial.

IN general, the over-all production of electric energy may be taken as a good index of the way the nation's economy is functioning, and a comparison of the curve of this year with that of last will show whether the state of industry and business is holding its own or is changing. Many power officials regard the statistics of the Edison Electric Institute as the quickest clue to economic change.

It is somewhat surprising that other branches of the government concerned with national business and industry statistics do not make more use of the figures on electric energy produced. The Federal Reserve Board, for example, does not include electric energy in its "chartbook" or in the statistical appendix to the *Federal Reserve Bulletin*. The Commerce Department's analysts, while keeping an eye on power generation, seldom write it up, although recognizing that for long-run studies of the country, or of an area, electric-energy data are a useful indication of changes in economic activity.

Observations of Westinghouse Official

SUGGESTIVE of the importance of electric-energy statistics in relation to problems of prices, wages, and productivity is a paper presented before the American Statistical Association in 1946 by Charles E. Young, manager

PUBLIC UTILITIES FORTNIGHTLY

of the statistical research department of the Westinghouse Electric Corporation. In his paper, "Applications and Problems of Productivity Data," Mr. Young noted the possibility of using in productivity analysis the data on kilowatt hours consumed in manufacturing. He suggested screening out the amount of power consumed in lighting and other nonproductive loads not varying directly with productive activity. "That power consumption is a practical measure of productive activity is illustrated by the fact that numerous plant managers keep a close check each morning on the power load as a gauge of the total activity in the plant."

Noting that during the peak war years 1943 and 1944 the Federal Reserve Board's index of manufacturing activity was about 15 per cent higher than a corresponding index of kilowatt hours consumed in manufacturing according to Federal Power Commission data, Mr. Young recommends that: "In the search for an index of industrial activity that can be checked and verified from various angles, the available information on electric power consumed in manufacturing should be brought more prominently into the picture."

Gas Statistics Less Useful

GAS is less useful than electric-energy consumption as an indica-

tion of business conditions. Industrially, gas is used more for treating raw materials than for turning lathes. It is used in iron manufacture, for processing certain products like lampblack, and for generating electricity. As between different localities, the use of gas varies according to its availability and cost, relative to other types of fuel and power.

Federal Power Commission's Monthly Figures

THE Federal Power Commission publishes monthly statistics on the production of electric energy in the United States, (a) by electric utilities and (b) by industrial establishments. In both cases, the figures are given separately for each state and for nine regional groups of states. Less than one-fifth of the electric energy produced comes from industrial establishments, whose output of energy shows hardly any variation within the year or from year to year during the period covered by the FPC—1942 to date. Public utility generated electric energy, on the other hand, showed a marked upswing during the early war years until 1944, a decline after VE-Day, and a renewed long-term uptrend since mid-1946.

This trend in generated electric energy needs to be borne in mind by business analysts using the data.



Q "... the over-all production of electric energy may be taken as a good index of the way the nation's economy is functioning, and a comparison of the curve of this year with that of last will show whether the state of industry and business is holding its own or is changing. Many power officials regard the statistics of the Edison Electric Institute as the quickest clue to economic change."

PUBLIC UTILITY STATISTICS AS BUSINESS SIGNS

II

Local and Regional Information

THE use of public utility statistics for the study of a city or market area can often be very helpful, because industrial production and business statistics are more often available on national than local basis. In using local utility time series care must be taken to allow for unusual factors, such as the extension of street lighting, local switching as from oil to gas heating of homes, substitution of busses for streetcars, and the like.

One needs to recognize, for example, that in commercial establishments as much electricity is used for lighting when business is bad as when it is good.

Under war conditions exceptional factors must be reckoned with: dim-outs and black-outs in the community; night work in factories and mines; and night shifts for restaurants and stores serving the industrial workers.

Utility statistics like any other figures cannot be used blindly without thought and study.

A Clue to Vacancies

IN many places the only clue to housing vacancies is to be found currently in the statistics on public utility connections, gas and electric. In using these figures, net changes in total connections should be obtained. Allowance may have to be made for temporary disconnections, as during the vacation period. In Ohio, for instance, the bureau of business research at Ohio State University for many years has published regular data for the state on public utility connections in use, the number added during the month, and the number idle.

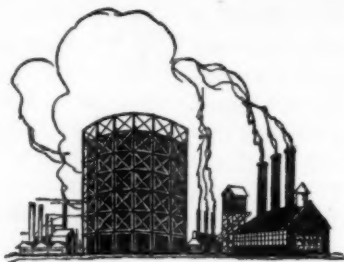
Developing Information from Utilities

THE value of local utility companies as sources of community business information is recognized by the Chamber of Commerce of the United States in its brochure, "How to Make a Local Area Trade Survey." The chamber states that utility officials know the area served by their companies and have considerable other information of value. "Most of the private and public utility companies," it says, "have conducted thorough analyses of the present and future market for their utility services and for various appliances which are related. Although the nature of this research differs between communities, very valuable information is available concerning the number of consumers by various classifications of income, residence, etc."

The chamber brochure notes also that current data are generally available on the number of installations being made each week and the total number of consumers. Many companies are able to provide mailing lists of new residents and consumers derived from these records. Summary up-to-date information on removals from the community may also be obtained. In connection with market surveys the chamber also suggests that analysis be made of the purchases by each utility company to determine the possible business available from these companies as consumers of supplies, etc.

Significance of Statistics Taken For Granted

IN view of the prominence of public utility statistics in the business in-



Gas Statistics Less Useful

"GAS is less useful than electric-energy consumption as an indication of business conditions. Industrially, gas is used more for treating raw materials than for turning lathes. It is used in iron manufacture, for processing certain products like lampblack, and for generating electricity. As between different localities, the use of gas varies according to its availability and cost, relative to other types of fuel and power."

dictators of chambers of commerce the writer inquired of a few chambers for light on the use to which businessmen may put such local data. There is a suspicion that the figures often are published for no better reason than that they are available.

The Dayton (Ohio) Chamber of Commerce, which each month publishes facts on electric power sales, electric meter consumers, and gas meter consumers, asked how businessmen may make use of these figures, had no answer but merely supplied a set of the figures to speak for themselves.

The Shreveport (Louisiana) Chamber of Commerce commented:

The uses to which businessmen may put the various indicators . . . are limited only by the vision and analysis of the individual businessman, but their use is very valuable to most anyone doing business in this area exclusively or . . . as a part of their regional or national operation.

The chief use, of course, of most of this

data is to indicate whether the community is growing in population as well as in business activity and volume, or whether the population is static or decreasing. The manufacturer or distributor who is interested in analyzing a local market can keep a file of this information and determine from it the rate of growth of the community, so that he can determine whether he is obtaining his fair share of the increase in business that can be anticipated from a growth in population and business activity. Those businesses interested in analyzing certain markets to determine where it might be most desirable to locate their next unit of operation can study such material, together with similar material from other communities, and determine to some extent from this material where it might be most desirable for them to locate a new operation.

Local business can use such data to advantage in determining its planning for expansion of business, or the addition of facilities based on the assurance that may be gained from a continued successful growth in population is such is indicated by the data compiled.

Tulsa Chamber Studies Utilities Carefully

THE Tulsa (Oklahoma) Chamber of Commerce publishes regularly

PUBLIC UTILITY STATISTICS AS BUSINESS SIGNS

very detailed statistics on public utility services in the community as well as occasional special circulars like Tulsa Fuel and Power, whose content is headlined "Tulsa and Eastern Oklahoma Offer Low-cost Fuels in Abundance, Plenty of Electrical Power." We, therefore, asked this utility-conscious chamber why businessmen should find its detailed monthly breakdown of various time series of use. The chamber replied as follows:

The most important use of such elements as numbers of utility meters is as indicators of activity in the absence of more reliable Census data, which are available only for specific intervals. We use numbers of gas, electric, and water meters in making periodic estimates of Tulsa's population. These data may be used as an indication of rate of growth. The rate of growth in Tulsa population outside the city limits this year, for example, may be approximately 15 per cent greater than the rate within the city limits. For such work a division of meters as to residential, commercial, and industrial best should be employed, and such a breakdown is reported regularly to us.

Utility companies make very special uses of these data, and these types of findings may or may not be available to separate bankers and businessmen. One reliable source, for example, has reported in confidence that at least 350 used car dealers in Tulsa will be expected to go out of business when the automobile market returns to normalcy, and there may be other possible forecasts even more surprising to us in view of market conditions and the great amount of activity here since the last Census of Business which was reported in 1940.

The numbers of telephones indicate an economic factor of consumer buying power and the demand of business establishments for such service. Each telephone set including extensions usually is included in the total. A division as to numbers of residential and business telephones is reported to us.

Residential gas consumption in Tulsa, where inexpensive natural gas is abundant, indicates a quality of the market, I believe—34.2 per cent increase in September over a year ago means that more people are using gas-consuming appliances including floor furnaces, ranges, refrigerators. This increase was not a result of seasonal climatic conditions.

Residential electricity consumption here has been influenced by the use of home air-conditioning units, refrigerators, other ap-

pliances—again an index of growth and quality of market, standard of living.

Commercial consumption of natural gas and of electricity are reliable indicators of business activity in Tulsa. The industrial consumption of natural gas may be used to indicate a trend in industrial activity here because of the dominance of that fuel in industry. Little fuel sold on industrial contracts is used for the heating of working space; such warmth is incidental. Most industrial furnaces here have been converted from the coal and fuel-oil burning types to gas. This practice results in the natural cleanliness of Tulsa.

Trends in water consumption are generally important to all of the Southwest where water is a number one problem, excepting in Tulsa where facilities have been increased to serve thousands of expected newcomers.

As cities grow and traffic problems come along, the employment of mass transportation becomes more important, so we follow the trend in numbers of city bus revenue passengers. The trend of this element was declining until recently. The price of gasoline, level of employment, and payrolls, availability of new cars, and school enrollment are among factors affecting this element.

A general reason for including the above elements in our report is simply to present data on numerous phases of the city's economy on which the information can be developed on a continuous basis.

Long-range Planning

PERSONS interested in business and industrial planning far into the future may find it helpful to review the several state and regional power market surveys published by the Federal Power Commission.

In the FPC's "Power Requirements Survey—State of Utah," for instance, one will find tables estimating for 1950, 1960, and 1970: (a) the labor force in the state in manufacturing, mining, transportation, construction, agriculture, forestry and fishing, and the service industries; (b) commercial energy sales, including such related factors as the number of commercial workers, use of energy per commercial worker, number of commercial customers and use per customer, ratio of residential to commercial sales, etc.; (c) industrial

PUBLIC UTILITIES FORTNIGHTLY

energy requirements, broken down into ten industry groups such as coal mining, iron and steel and their products, nonferrous metal smelting and refining, etc.

To ascertain whether there is such a survey for an area in which the reader is interested, inquiry may be made of the Federal Power Commission, Washington 25, D. C.

Business Responsibility for Security

"THERE are limits beyond which business cannot go in providing security, but in general it can do more than it has been doing. This problem in human relations should challenge the best that is in us.

"We must constantly keep this open door policy before our employees. I believe this is the greatest weapon that business has today against the 'isms' attacking America. Give opportunity to the man who wants opportunity, and he will make the most of it and be a great booster for the American way.

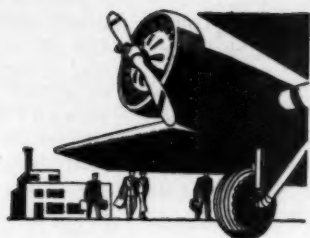
"Another way of expressing this principle is to say that employees should not be treated as pickets in a fence or as cogs in a machine. They must be accepted as associates who have self-respect and self-confidence. Each should be given the opportunity to advance if he or she is willing to pay the price in intelligent hard work.

"But assuming your employee has sufficient income and a reasonable degree of security—is he content? No, he wants more than these. He craves satisfaction in his work. He wants the respect of his fellows and to feel that he belongs—that he is a member of the team.

"These wants are much less definite than wages and hours of work, pensions, and insurance. But they are equally important. To ignore them is to invite discontent and inefficiency. This underlying sense of frustration and restlessness is basic, and granting demands for shorter hours and higher wages will not by themselves eliminate it.

"We of industry must remember that it was the hare's attitude that caused him to lose to the tortoise. It was the attitude of the tortoise that caused him to win. It is our job to give such account of our stewardship that we will create and maintain a favorable mass public attitude toward business and the free enterprise system."

—HARRY A. BULLIS,
Chairman, General Mills, Inc.



The Air-line Regulation Crux

Many distinctive factors, including competition, routes, and mail subsidies which affect the development and solvency of this expanding industry, must be considered by the Civil Aeronautics Board. It may well remain, in the opinion of the author, for the imposition of basic utility concepts of regulation to give the air lines the stability they urgently need.

By SELIG ALTSCHUL*

A MORE realistic regulatory atmosphere may be in the making for the nation's air lines. The Civil Aeronautics Board is assuming the initiative in attempting to reshape the air-line network with fewer but stronger carriers emerging. In this process, the public utility concept may be advanced as the dominating factor.

A bold step in this direction was taken by the board in its September 28, 1948, action instituting an investigation as to the possible dismantling of National Airlines, Inc., by the transfer of that company's routes to other carriers.

It is probable that National was chosen because of the ramifications evolved by its strike-embroiled operations. Certainly, other carriers were, in some respects, even more logical candidates for dismemberment in that their disappearance would cause no detri-

ment to the country's air-line network. Further, such proceedings directed at those carriers where the desirability of removing excess route mileage is more clearly defined, would have clarified the issues and endowed the board's program with a greater degree of success.

The trial effort—and it may prove just that—in the National case, may very well influence the board's course in pursuing subsequent proceedings of this nature.

In any event, the air carriers are faced with the prospect of a thorough going over by the regulatory authorities in the hope of once again restoring the industry to a stable basis. A major recasting of the air-line route structure may be the final accomplishment in the attempt to eliminate the prevailing financial chaos, a current characteristic of the group.

With the passage of the Civil Aeronautics Act of 1938, the commercial

*For personal note, see "Pages with the Editors."

PUBLIC UTILITIES FORTNIGHTLY

air carriers were accorded great promise of stability. Unquestionably, this far-reaching piece of legislation revived a floundering air transport industry from incipient collapse. Up to that point, according to the late Colonel Gorrell, then president of the Air Transport Association of America, of the \$120,000,000 of private investment made in the air lines, more than \$60,000,000 was gone.

THE Civil Aeronautics Act represented a forward stride in the regulatory processes and was launched with great expectations. The industry had a long familiarity with chaotic regulation administered by conflicting government departments.

A new era with new rules was now in effect. The Civil Aeronautics Act of 1938 authorized the issuance of certificates of public convenience and necessity to air carriers permitting the transportation of persons, mail, and property. This represented a franchise granted the fortunate recipients permitting them a legal "right of way" in the sky.

Like other legislation dealing with transportation, the Civil Aeronautics Act contains a formal declaration of policy. In this declaration, there remains no doubt of the intent of Congress to recognize the public interest in air transportation beyond that of the postal service. This statement of policy directs the authority (predecessor to the board) to consider the following:

a. The encouragement and development of an air transportation system properly adapted to the present and future needs of the foreign and domestic commerce of the United States, of the Postal Service, and of the national defense;

b. The regulation of air transportation in such manner as to recognize and preserve the inherent advantages of, assure the highest degree of safety in, such transportation, and to improve the relations between, and coordinate transportation by, air carriers;

c. The promotion of adequate, economic, and efficient service by air carriers at reasonable charges, without undue discriminations, undue preferences or advantages, or unfair or destructive competitive practices;

d. Competition to the extent necessary to assure the sound development of an air transportation system properly adapted to the needs of the foreign and domestic commerce of the United States, of the Postal Service, and the national defense;

e. The regulation of air commerce in such manner as to best promote its development and safety; and

f. The encouragement and development of civil aeronautics.

THIS broad mandate has been repeatedly interpreted by the CAB and petitioning air lines in support of conflicting points of view.

Little doubt remains as to the public interest vested in the air lines. As far as regulation is concerned, the group may be catalogued with other public utilities. Nevertheless, a number of important distinctions exist between the air lines, on the one hand, and railroads and other old-line public utilities, on the other hand.

Unlike the electric power industry, for example, the air carriers do not enjoy any monopoly in their area of operations. Intensive competition prevails among the air lines due to the duplication and triplication of certificated services over the same routes. This is without regard to the competition provided by rival forms of transportation such as railroads, busses, etc.

THE AIR-LINE REGULATION CRUX

Railroads and other public utilities require extensive investments in fixed properties to develop a given amount of business. The air lines, while having certain property of a long-term permanent nature, do not have comparable fixed investments. For instance, recent studies show that for each dollar of gross revenues, the railroads require a total investment of better than \$3.50. By contrast, the air lines need only supply less than 80 cents to develop gross revenues of \$1. As a result, capital requirements of the air lines differ from the established public utilities and assume an entirely different financial pattern.

OPERATING characteristics of air lines more closely approximate those of competitive industrials rather than public utilities. For this reason, in order to attract capital to the industry, the air lines have pleaded for a higher rate of return on the investment than prevails in the public utility field as the risks are represented to be much greater. For example, in its recent proceeding before the CAB for higher mail pay, Capital Airlines declared: "Past experiences have demonstrated that the risk to air-line capital is far greater than the risk to investments in monopolistic utilities well entrenched in their areas of operation."¹

¹ Docket 484, PCA exhibit 19.

A number of interesting features surround the status of the Civil Aeronautics Board in its regulatory processes. Congress intended this agency to be independent, free from executive interference so far as its quasi legislative and quasi judicial powers are concerned. These distinctions prevailing for the air lines all combine to give the group the status of a pseudo or quasi public utility.

One of the basic ailments of the air lines is diagnosed, by some observers, as too much competition within the industry. This condition is attributed to the multiplication of competitive routes by the CAB. This policy appears to clash with the basic utility concept in a regulated industry where certificates of public convenience and necessity or franchises represent an integral factor.

In accepting a certificate, an air carrier gives up certain privileges such as, (1) the right to discriminate unduly between individuals, groups, sections of the country; (2) the right to adjust prices constantly and abruptly from day to day; (3) the right to operate when, where, and as it pleases; and (4) the right to withdraw quickly those services it finds unprofitable.

THE flexibility lost by accepting a certificate is frequently a high price to pay as the relinquishment of



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PUBLIC UTILITIES FORTNIGHTLY

such freedom of action is very important in assuring profitable results. In return, however, freedom from excessive competition and, in the case of some utilities, freedom from all competition, is a natural expectation. Instead, an amazing amount of competition has developed to the point where the air lines find themselves operating in an atmosphere almost akin to that of an unregulated industry. This condition has led industry partisans to contend that full benefits have not been received in return for the surrender of certain freedoms.

Another side of the coin is found in that aspect of the Civil Aeronautics Act not peculiar to any regulatory measure covering surface transportation or any other public utility for that matter. This is embodied in § 301 which empowers and directs the CAB to encourage and foster the development of civil aeronautics and air commerce in the United States and abroad.

Such encouragement quite obviously is expressed in the rate of payment for the carriage of mail awarded the separate carriers. Such compensation is designed to be in accordance with the "need" of each air carrier and does not have to bear any direct relationship with the actual cost of this mail service. The purpose of these mail payments was clearly stated by the board in establishing mail rates for American Airlines in an action released on March 12, 1942. The board declared:

The "compensation" to be paid to the air carrier in the air-mail rate is not merely compensation for the transportation of mail. The use of mail payments is a statutory device for the accomplishment of national objectives that transcend the interests of the Postal Service. Those objectives, expressly stated in the act, encompass the maintenance and continued development of air transportation to the extent and of the character and

quality required for the commerce of the United States, the Postal Service, and the national defense. The "compensation" which the carrier receives thus becomes compensation not only for carrying the mail but for the building up of a system of air transportation which will serve the nation's commerce and security as well.

It is evident that the mail rate awarded by the board is a potent device in regulating the financial health and make-up of the nation's air lines.

THE modern air-line network crystallized in three distinct stages. The nucleus was present in the "grandfather" routes of about 39,000 miles allowed to remain in operation following the creation of the Civil Aeronautics Act of 1938. The board and its predecessor, the authority, moved cautiously and slowly during the prewar period of 1938-1942 and added but 7,200 miles in certain extensions and new routes. With the coming of war activities, new applications were frozen and expansion of the route pattern virtually ceased. Along in late 1942, a few route applications were unfrozen. In a series of designated area cases, starting in May, 1943, new mileage was added to the air-line network. When this process finally ground to a halt, almost 69,000 new route miles were created, making a total trunk line network of some 115,200 miles. This excludes feeder carriers and the international and territorial routes.

In addition to the increase in route mileage, the postwar period witnessed a tenfold increase in the investment for flying equipment and the doubling of the labor force.

During this period of rapid expansion and competition for new routes, awards were often based on extremely optimistic estimates of traffic and costs.



Higher Rate of Return for Air Lines

“OPERATING characteristics of air lines more closely approximate those of competitive industrials rather than public utilities. For this reason, in order to attract capital to the industry, the air lines have pleaded for a higher rate of return on the investment than prevails in the public utility field as the risks are represented to be much greater.”

Of greater consequence, many of the route extensions showed little relation to any over-all standard of national route planning.

DISTORTIONS in the existing route pattern are, in a large measure, due to an effort to make adjustments for the type of aircraft available at the time. For a good many years, the twin-engine DC 3 was the only transport type available and route segments were adapted accordingly. With the coming of the 4-engine DC 4, the time and distances of the air-line map were shrunk considerably. The installation of the pressurized DC 6 and Constellation in regular passenger service made necessary a further drastic recasting of route conceptions.

For example, when the DC 3 was supreme, United, TWA, and American, all had transcontinental routes to the West coast. United had a terminal on the West coast at San Francisco

while the other two, by different courses, terminated at Los Angeles. There was little direct competition among the three carriers for intermediate business between Chicago and the West coast. The coming of the huge, fast aircraft capable of flying great distances, changed all this. Now all three lines serve San Francisco and Los Angeles direct from Chicago to say nothing of the points further east.

Many weak carriers advanced the premise that with more mileage, more economical operations would ensue thus relieving the pressure for support through mail payments. It was also contended that one-carrier service (through operation by the same air line) would be provided between various points, affording greater convenience to the traveling public. The failure of passenger traffic to reach anticipated volumes revealed the vulnerability of many of these new route awards. Significantly, previous ailments instead of

PUBLIC UTILITIES FORTNIGHTLY

being cured were compounded by this approach. Results have demonstrated that there is no economic cure in simply making big lines out of little ones without regard to the over-all pattern.

WHILE the present CAB is frequently criticized for the financial chaos appearing in various segments of the air transport industry as a result of excessive route mileage, it is fair to point out that the expansion took place under the sponsorship of previous CAB administrations. Further, virtually every carrier, at one time or another, has painted an optimistic picture of a continuing upward surge of traffic in support of extensive route extensions. With this backward glance, the carriers themselves and previous CAB leadership can be held to be jointly responsible for conditions existing today. Recalling the optimistic atmosphere prevailing in the postwar period, only an autocratic board, possessed with infinite powers to peer into the future, would have been capable of averting the overduplication of routes existing today. Moreover, in past decisions, when the board was forced to choose between two carriers for certain route segments, the successful applicant beamed satisfaction at the agency's wisdom while the losing carrier was far from charitable.

In awarding routes in the international or overseas areas, the ultimate responsibility remains with the President of the United States. Presumably, the President is aware of considerations of national interest which he may or may not see fit to disclose to the CAB in its deliberations. For this reason, the present make-up of United States certificated foreign routes large-

ly reflects the influences exerted by White House administrations.

IN this process, certain international routes have been created which can find little support from the commercial traffic available. An outstanding example of this is found in the service available between the Pacific Northwest and Hawaii. Early last year, a CAB examiner recommended that there was an insufficient traffic potential in this area to support even one operator without high subsidies. After some delay, the White House directed that Northwest be certificated for this route. In October, President Truman again intervened in directing that the CAB certificate Pan American Airways for a parallel Pacific Northwest-Hawaii route. This low traffic density area will be confronted with air competition from other sources as well. The Canadian Pacific Airlines, subsidiary of the potent Canadian Pacific Railway, plans to inaugurate air service from British Columbia across the Pacific via Hawaii. Replacing its former extensive pre-war steamship service in this area, Canadian Pacific may be expected to aggressively promote its international air line. Of lesser significance is the projected Australian national air service coming from the opposite direction serving Hawaii and British Columbia.

In any event, the era of widespread expansion in the domestic field is at an end, temporarily at least.

IN the adjustment processes that are bound to ensue, it is highly possible that the CAB may attempt to apply regulatory approaches more closely orthodox to the basic public utility concept.

THE AIR-LINE REGULATION CRUX

In this respect, the board is now engaged in a comprehensive analysis of the domestic route pattern. The results of this study may very well point up the specific trouble spots for corrective action.

The adjustments that may ensue will most likely usher in an era of consolidation. Route realignments, equipment interchanges, and mergers will be the devices used.

The national investigation appears to be a definite step at an attempt of route realignment. As previously indicated, the ultimate outcome in this instance is subject to considerable doubt.

The board may prod, but it appears that it cannot legally force a carrier to dismember itself. The same effect, however, may be accomplished through other means.

At present, the board is displaying less reluctance to use the mail pay device toward this objective. This represents a shift of philosophy on the part of the present CAB. A few years ago, a former chairman, James M. Landis, proposed to withhold subsidy mail payments as a means of reducing or removing duplicating mileage represented by Chicago & Southern's routes in the Caribbean area. The majority of the board disagreed with this approach and maintained the high mail subsidy rate. In his dissent at that time, Mr. Landis

declared: "... the United States is not bound for all time by awards that may have been made, nor is the board under the act helpless to correct its mistakes and to liquidate, without undue hurt to all involved, an investment that may have been made on the strength of an award."

THE CAB unquestionably can bring pressure on an air line indirectly through the amount of mail payments it may award or withhold. The board's power to revoke a certificate of public convenience and necessity on strictly legal grounds remains a tenuous issue. Even the present members of the CAB are in decided variance on this question.

As recently as July 23, 1948, in reaffirming its previous award of the Kansas City-Memphis route to Chicago & Southern, three members of the board, constituting a majority, declared: "We have grave doubts, however, as to our possession of such power (to revoke a certificate) . . ." In a dissenting opinion, the minority declared: "Nor do we share the doubts apparently entertained by the majority as to the board's power to revoke, upon reconsideration, the certificate previously awarded to Chicago & Southern."

The board's power to suspend routes has never been put to the test. Any



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PUBLIC UTILITIES FORTNIGHTLY

revisions attempted in this manner will be accompanied by considerable legal wrangling with the final determination adjudicated by the courts or ultimately resolved by Congress. Significantly, Chairman O'Connell recently declared:

The board also has the clear legal authority to revoke the certificate of a carrier which deliberately and repeatedly violates the law or the board's regulations. Thus far this section has never been utilized. Until we have found that the other tools we possess are inadequate to do the kind of route realignment which must be done, I personally am not disposed to request Congress for power to revoke a certificate for other than cause. But I would not be bashful about requesting the power because of any theories which may exist with respect to the sanctity in perpetuity of a certificate of public convenience and necessity.

COMING into greater prominence is the equipment interchange arrangement. This was first tried by United and Western about ten years ago in providing a single plane service from the East to Los Angeles via Salt Lake City. More than a year ago, the board gave this approach real impetus by approving the single plane service operated by Pan American Airways and Pan American-Grace (Panagra) from Miami to South American points. The plane is operated by Pan American north of the Canal Zone and by its associate south of that point. This provides through passenger service without changing planes and precluded extending Panagra into Miami as previously desired by that carrier.

Similarly, the equipment interchange arrangement approved for TWA and Delta at Cincinnati early in 1947 avoided creating new route mileage. Through service without change of planes was made possible from Detroit, Toledo, and Dayton on TWA's system to Atlanta, Miami, and other points on Delta's routes.

Now awaiting action by the CAB is an equipment interchange proposal filed by Capital and National. If approved, through service would be provided over key segments of the two systems.

Only recently, American and Delta placed their joint proposal in the board's hopper for one-plane transcontinental service between the Southeast and the West coast over the routes of the two systems. This move evidently fits in with the CAB's recent action in instituting a proceeding in examining whether single-plane service in this general area would best be served by an equipment interchange proposal.

THE active participation of at least ten applicants for a new southern transcontinental route, illustrates the reluctance of any carrier to forego the opportunity of acquiring new route mileage, to say nothing of eliminating segments. The industry is forever contending that there is too much competition. Yet, each major air line is constantly attempting to extend its routes. Sacrifices are prescribed for the next fellow but rarely self-administered. In the so-called "Southern Service to the West" case, which covers this particular proceeding, new southern routes are being actively sought by: Eastern, Braniff, Delta, Continental, Capital, National, and Chicago & Southern. Most of these carriers are presently far removed from the area they propose to serve.

While attorneys for these carriers may continue to enjoy a field day in these new route proceedings, the general atmosphere is no longer conducive to additional mileage being granted.

Along with the adjustments pre-

THE AIR-LINE REGULATION CRUX

viously indicated, the merger device has received renewed support as a medium to correct a number of weak links. The merger path for air lines is paved with many obstacles. Many have tried, but thus far, none have succeeded in making the grade since commercial aviation came into its own with the passage of the Civil Aeronautics Act of 1938.

The hurdles are many and complex. Strong personalities of air-line chiefs always clashed when a showdown came as to who was to become the grand potentate in any merged system. Once agreement at the top level is accomplished, proposals must run the gamut of obtaining the sanction of the separate boards of directors and subsequent approval of stockholders.

THE biggest obstacle remains in obtaining CAB approval. The board must find any such proposed arrangement as not violating § 408-B of the act which holds that mergers shall be approved unless "such mergers shall not be consistent with the public interest." Further, the law directs the board not to approve any arrangement which

would "result in creating a monopoly . . . or jeopardize another air carrier not a part to the agreement." This broad directive poses many enigmas for the CAB. Proposed mergers generally can be expected to provide more effective competition for some other carrier in the same area. The board is on record as favoring "desirable" mergers and consolidations but the industry has yet to present one which will satisfy the CAB's definition and requirements.

Proposed route realignments, equipment interchanges, and mergers promise to follow a tortuous course before they are widely implemented in rearranging the nation's air-line network.

The vibrant forces of aviation created a special regulatory atmosphere of its very own to guide the strong growth trends of its commercial transport phases. In retrospect, courses pursued under these pervading influences have not always developed as originally conceived.

It may well remain for the imposition of basic utility concepts to give the air lines the stability they so urgently need.

"SINCE the world fell apart in 1914, we in America have done some things well and some things not so well. We have a great deal to be proud of. Most of all we have to be proud of our part in winning two world wars, and in helping the world abroad to survive the hideous consequences of war, the dreadful loss of life and health and wealth. We may be proud that we have kept our country sound and our money sound by paying taxes and buying bonds to meet the costs of war. We are prosperous and fully employed. We are free and energetic and busy as bees. Let us stay so. If we would stay so we must reject the planned and frozen economy in all its aspects."

—R. C. LEFFINGWELL,
Chairman, J. P. Morgan & Company.



Thomas Edison's 102 Years

Astounding accomplishments and public benefits which came from the mind and hand of the master inventor who held 1,097 patents, the largest number ever issued to an individual by the United States Patent Office.

By JOHN C. F. COAKLEY*

DURING the month of February, we observe the birthdays of three great Americans — Washington, Lincoln, and Edison. Washington was great not only because of his military leadership which helped win America's freedom, but also because he had the vision to unite thirteen struggling colonies into the nucleus of our nation.

Were it not for Lincoln, there might not be a United States of America. Lincoln had the courage to fight to keep the states united and to assure all men equal rights.

The third, Edison, helped make these United States powerful through inventions giving its people industrial and scientific leadership, as well as the worlds highest standard of living.

Without these three great sons of February, this country might never have reached its stature as leader among the nations of the world.

*For personal note, see "Pages with the Editors."

FEB. 3, 1949

Our country has known many rapid changes in its swiftly moving history, but the years have been crowded with progress since Edison invented the first practical incandescent lamp. He saw the need for and proceeded to invent an entire system of electrical generation and distribution. With the giant of electricity at its command, America grew. New industries were born and with them new jobs for millions of people.

However, it was not electricity alone which occupied Edison's inventive mind, for before he was through he held 1,097 patents, the largest number ever issued to an individual by the U. S. Patent Office. Of these, 356 dealt with the incandescent lamp and the distribution of electric light and power.

Edison was thirty-one and already an established inventor when, in 1878, he first became interested in lighting by electrical incandescence. Others before and contemporary with him had attempted to solve this problem, but

THOMAS EDISON'S 102 YEARS

without success. In his search for a satisfactory filament material, Edison tested hundreds of materials which could be obtained domestically, and his agents searched the countries of the world for strange plants and fibers which might serve the purpose. However, it was a piece of cotton thread, carbonized with lampblack, which was the filament for the first successful lamp. Edison knew that he had achieved his goal when, on October 21, 1879, this lamp had burned with a clear, steady light for more than forty hours.

THE lamp was just the beginning—a complete system of electric generation and distribution was necessary in order to make the invention commercially successful. Edison invented and devised the dynamos, conduits, insulators, fuses, sockets, and meters necessary for the system. One of his most important contributions, according to electrical engineers, was the development of the multiple arc system of current distribution which made efficient and economical distribution possible. Until this was developed, it was believed that lighting with electricity would be impractical because all lights on a circuit would either have to be lighted or turned off at the same time.

Edison's mind was always alert for new applications of his inventions and of the knowledge which he gained from them. For example, his automatic telegraph, which utilized a perforated piece of paper on a turntable, would give forth a musical humming when it was revolved so swiftly that the dots and dashes blended together. If this was possible, thought Edison, could

not the human voice be captured for reproduction by such a device?

Action swiftly followed the thought and, on August 12, 1877, the phonograph was born. A crude instrument employing tin foil wrapped around a revolving drum as the record, this invention opened a whole new field of musical enjoyment to all, including those to whom music had heretofore been an unattainable luxury. Today nearly every home has a phonograph, and records, both popular and classical, are produced by the millions. What is more, Edison visualized the future of this medium in education as he did with another of his famous inventions which he said would "do for the eye what the phonograph does for the ear."

WORK on the motion picture camera was begun in 1887 and, two years later, on October 6, 1889, the first motion picture—a talking picture—was demonstrated at Edison's West Orange laboratory. In keeping with his statement, Edison had synchronized the film with his phonograph so that sight and sound were combined. It was at this laboratory that motion pictures were produced by Edison in a tarpapered building which revolved on a track to utilize the sun's rays for stage lighting. Newsreels of the Boer War were reenacted in the Orange mountains and such early thrillers as "The Great Train Robbery" set the pace for the development of today's vast motion picture industry.

Electric light, phonograph, motion picture camera—enough inventions for one man, you say. Perhaps, for a mind which did not constantly seek new ways of doing things more efficiently and with less effort. While a



Edison's Education

"EDISON's formal education was limited to less than a year in attendance at school. His mother, a former schoolteacher, supervised the remainder of his schooling. However, his fondness for study and the wide range of his interests made him a highly educated, if informally educated, man."

young telegrapher, Edison began applying those talents which were to mark his work the rest of his life. He began by developing improvements for the telegraph, and his systems for sending multiple messages over the same set of wires greatly advanced the field of telegraphy. His inventive genius also produced a system of wireless telegraphy which he patented six years before Marconi; the transmitter that helped make the telephone commercially practical and is the basis for the radio microphone; the basic discovery on which rests the science of electronics; the first fluorescent light; the fluoroscope, and the first electric railroad locomotive in America. In addition he devised revolutionary improvements in storage batteries, in the mining and milling of iron ore, the production of Portland cement, and he succeeded in producing rubber from goldenrod.

ONE might ask what educational training this phenomenal man

had received. Edison's formal education was limited to less than a year in attendance at school. His mother, a former schoolteacher, supervised the remainder of his schooling. However, his fondness for study and the wide range of his interests made him a highly educated, if informally educated, man.

Edison denied genius. He said: "Genius is 1 per cent inspiration and 99 per cent perspiration." He would work round the clock when interested in some tough problem, and his perseverance is attested by the fact that he spent ten years and performed 50,000 experiments in his search for a successful nickel-iron-alkaline battery. Think of it—50,000 failures before success!

Work was an integral part of Edison's life and, because he recognized its importance, new jobs were created for millions of men and women in new industries which today have capital assets in excess of 20 billion. This is a

THOMAS EDISON'S 102 YEARS

conservative estimate of the direct results of Edison's inventions. Were these estimates broadened to include industries which did not spring directly from Edison's inventions but which would have been impossible without his preceding contributions to industrial and scientific progress, the figures would form a major part of our national wealth.

Edison's faith in America, the country which he helped make preëminent

among the nations of the world, is summed up in these words spoken during one of his last public appearances before his death on October 18, 1931: "Be courageous. I have lived a long time. I have seen history repeat itself again and again. I have seen many depressions in business. Always America has come out stronger and more prosperous. Be as brave as your fathers before you. Have faith. Go forward."



Important Events in the Life of Thomas Alva Edison 1847—1931

Compiled by the author, historian of Edison Pioneers

- 1847—February 11th—born at Milan, Ohio, son of Samuel and Nancy Elliott Edison.
- 1868—Made his first patented invention—the Electrical Vote Recorder. Application for patent signed October 11, 1868.
- 1869—October—established a partnership with Franklin L. Pope as electrical engineers. This partnership, although of brief duration, resulted in the invention of the "Universal" Stock Ticker, also the "Unison" device for automatically bringing into synchronization all stock tickers on a given circuit.
- 1875—November 22nd—discovered a previously unknown and unique electrical phenomenon which he called "etheric force." Twelve years later, this phenomenon was recognized as being due to electric waves in free space. This discovery is the foundation of wireless telegraphy.
- 1877—April 27th—applied for patent on the carbon telephone transmitter which made telephony commercially practicable. This invention included the microphone which is used in radio broadcasting.
- 1879—Invented the first practical incandescent electric lamp. The invention was perfected October 21, 1879, when the first lamp embodying the principles of the modern incandescent lamp had maintained its incandescence for more than forty hours.
- 1882—September 4th—commenced the operation of the first commercial central station for incandescent lighting at 257 Pearl street, New York city.
- 1883—Discovered a previously unknown phenomenon. He found that an independent wire or plate, placed between the legs of the filament of an incandescent lamp, acted as a valve to control the flow of current. This became known as the "Edison Effect." This discovery covers the fundamental principle on which rests the modern science of electronics.
- 1928—October 20th—presented with the Congressional Medal of Honor by Andrew W. Mellon, Secretary of the Treasury.
- 1931—October 18th—died at Llewellyn Park, West Orange, New Jersey, at the age of eighty-four; survived by his wife, Mina Miller Edison; his four sons, Thomas Alva, Jr., William Leslie, Charles, and Theodore, and his daughters, Marion Edison Oser and Madeleine Edison Sloane.

Washington and the Utilities



Two Billion for Projects

THE simplest appraisal of President Truman's 6½-pound budget is that it roughly earmarks a little less than two-thirds of the Federal expenditures for the Siamese twins of national security; namely, armed forces (including veterans' programs) and foreign economic aid. The remaining third is split into three parts—about 35 per cent to interest on debt, another 35 per cent for domestic housekeeping expenditures, and the remaining 30 per cent for the two Siamese twins of domestic social investment—health and security and the development of natural resources.

This means that about 5 per cent of the entire \$41.8 billion budget would go for the development of natural resources and a good deal of this includes expenditures for project spending which contain in whole or in part some provision for the production of electric power by the Federal government.

Getting down to less general classifications, the over-all estimates for the fiscal year of 1950 for natural resource developments, which includes some measure of electric power development, total nearly \$2 billion. Of course, not all of this is for public power—not even half

of it. Only a portion of the total could be allocated on any reasonable basis to electric power alone. The exact amounts for various projects will be made clearer when individual appropriation bills come before congressional committees. We can only say at this time, after a rather casual inspection of the budget, that estimated expenditures for multi-purpose projects vary from a small fraction in the case of Atomic Energy Commission (whose work on electric reactors was emphasized in the President's message) to pretty nearly the bulk of the expenditure for power in the case of the Bonneville Administration.

IN the following table there also has been included, because of its prominence in the public power field, the figures for Rural Electrification Administration, which is really an appropriation for loans and therefore self-liquidated over the period of such loans. With these qualifications in mind, however, the table below gives an over-all portrayal of "project spending" listed in the budget which embraces in whole or in part funds for more public power to be developed (in millions of dollars).

It will be noticed that the President included only \$8,000,000 for work to be

Federal Agency	1948 (Actual)	1949 (Estimated)	1950. (Estimated)
Atomic Energy Commission	466	632	725
Engineers Corps (Civil Functions)	246	442	481
Bureau of Reclamation	175	282	340
Bonneville Administration	18	31	41
Tennessee Valley Authority	34	29	49
REA Loans (Part of Agriculture)	239	283	330
St. Lawrence (Legislation Proposed)	—	—	8
Total	1,178	1,699	1,974

WASHINGTON AND THE UTILITIES

done on the St. Lawrence seaway-power project which has not even yet been authorized by Congress. The only other hint of what the administration expects by way of new legislation in the project spending field from the 81st Congress is the tabular estimation in his budget message of \$90,000,000 for commercial development of synthetic fuels by the Bureau of Mines.

Of course, speaking of hints, perhaps it might be said that President Truman's reference to the need for reexamination of present plans for the Missouri basin development amounted to an intimation that Congress will do something about creating a Missouri Valley Authority. The President's exact words on this were: "Because of the great increase in the estimated cost of the Missouri basin development, the present plan should be reexamined to determine needed changes."

Another interpretation, however, would be that the President does not want the work to slow up because of high prices on construction costs which have caused all estimates of project spending to be running way below the mark.

In other words, when President Truman gets ready to recommend an MVA he is going to do more than hint about it.

In any event, Senator Chan Gurney (Republican, South Dakota) and Senator Kenneth Wherry (Republican, Nebraska) took the view that for the present the Chief Executive is disposed to go along with the Missouri valley development under the Army Engineers-Reclamation setup.

Both Republican Senators told reporters after meeting with President Truman that they had come in to "assure the President we're back of him on development of the Missouri valley project and other water-use projects all over the nation."

EVEN advocates of MVA were somewhat disappointed in President Truman's failure to take a more specific stand in his state of the Union message

to Congress. On this point, President Truman said at that time: "We must push forward with the development of our rivers for power, irrigation, navigation, and flood control. We should apply the lessons of our Tennessee valley experience to our other great river basins."

George H. Hall, Washington correspondent for the *St. Louis Post-Dispatch*, which is a red-hot advocate of the MVA, reported back to his newspaper on January 5th:

MVA supporters who learned a few days ago that the Department of Interior, through Secretary Krug, had sent Truman a memorandum unexpectedly indorsing the valley authority approach, had hoped the President would take a firmer stand.

One MVA supporter told the *Post-Dispatch*: "That is much feeble than Krug. It seems to indicate that Pick is very strong at the White House."

This was a reference to Major General Lewis A. Pick of the Army Engineers, who was the coauthor of the Pick-Sloan plan for Missouri valley development by the Engineers and the Reclamation Bureau.

Other references to public power in the President's budget message were as follows:

The program of the Bureau of Reclamation is going forward on major projects in the Central valley of California, the Columbia basin, the Colorado river area, and the Missouri basin. . . . Two large projects to be constructed by the Corps of Engineers are recommended for initiation in the Columbia basin in the fiscal year 1950, in order to meet increasing power demands.

The Tennessee valley, where the government has broad responsibilities for power supply, faces a power shortage in the near future. Expansion of Tennessee Valley Authority's generating capacity is vital not only for the growing normal power demands, but also for the expanding needs of the atomic energy program.

I recommend an immediate appropriation for 1949 to initiate construction of a steam plant to permit more effective utilization of the hydroelectric power resources of the area, and additional funds for 1950 to expedite progress on the project.

Construction by the government of transmission and distribution facilities is essential in some areas for marketing the power from government projects in compliance with law, which gives priority to public agencies and coöperatives.

PUBLIC UTILITIES FORTNIGHTLY

Bills in Congress

MORE than fifty of the first thousand bills introduced during the opening week of Congress—or roughly 5 per cent—had to do with matters of direct or indirect interest to public utility industries. When one stops to consider the fact that about half of all bills so introduced “private bills” are these bills of utility interest rise to the order of about 10 per cent of all measures dealing with general public legislation. Far and away, the greatest number dealt with labor matters. These roughly fall into two subdivisions: (1) bills to repeal or revise the Taft-Hartley Act with its special “vital industries” clause applicable to major public utility strikes, and (2) bills to increase the minimum hourly wage which has a special significance for small independent telephone companies.

The Taft-Hartley bills were almost too numerous to mention in a brief general survey. Representative Lesinski, chairman of the House committee, and Senator Thomas, chairman of the Senate committee, already have hinted what the President wants by way of “one package” repeal and modification of the Taft-Hartley Act. There seems little point in taking up a host of individual bills, many introduced by Republican and freshmen Democrats, which have little chance of serious consideration and were thrown in the hopper simply for publicity purposes.

IT now appears that the new Thomas-Lesinski Bill will follow pretty closely President Truman's idea of banning boycotts, jurisdictional and secondary strikes, and strikes to enforce economic interpretation of labor contracts. Also likely to slip into the final law is President Truman's suggestion which goes even further than the Taft-Hartley Act—that he be given authority to prevent strikes in vital industries. The present law gives him authority merely to set in motion a cooling-off procedure.

About a dozen of the bills to increase minimum wages vary from 75 cents to \$1. But the final informed guess in

Washington is that the 75-cent level will prevail. One bill, by Representative Miller (Democrat, California), HR 995, would eliminate the exemption now enjoyed by small telephone exchanges from overtime and minimum wage provisions of the Fair Labor Standards Act, as applied to telephone operators. This change may or may not be taken up in the final revision of the act, expected to be passed sometime during the session.

Three out of five of the early bills affecting the Rural Electrification Administration would give it authority to make loans for rural telephones—one, S 78, by Senator Langer (Republican, North Dakota) especially authorizes \$300,000,000 for that purpose. The other two bills would grant additional funds to REA for rural electric development.

Eight bills sent to the House Ways and Means Committee during the first week of the session would variously repeal or reduce wartime excise taxes, including the special levies on such utility services as passenger fares, telephone and telegraph service, and one, HR 558 by Representative Shafer (Republican, Michigan), would even repeal the excise tax on gas, electric, and oil ranges. Then, there is the excess profits tax.

EARLY regulatory bills provide no special surprise. HR 79 by Representative Lyle (Democrat, Texas) would remove natural gas production and gathering from control of the Federal Power Commission. Representative O'Hara (Republican, Minnesota) wants to repeal the Bulwinkle Act exempting railroads from antitrust suits where joint rates are approved by the ICC. HR 159 by Representative Cresser (Democrat, Ohio) is a minor bill to permit hold overs on FPC vacancies. Representative Dolliver (Republican, Iowa) has renewed his bill, HR 982, to amend the Natural Gas Act by forbidding pipe-line operators to take on new customers before old ones are assured of service.

There are two bills to promote synthetic fuel developments and one bill to set up independent regulation of civil aeronautics.

Exchange Calls And Gossip



Communications in Civil Defense

"AMERICA definitely has a 'missing link' in its defense structure." That is the introductory sentence in a 325-page report to the Secretary of Defense by the Office of Civil Defense Planning. The title of the report is "Civil Defense for National Security," and it was prepared under the direction of Russell J. Hopley, president of the Northwestern Bell Telephone Company.

The above startling introductory sentence is amplified as the report proceeds, but a couple of sentences from the introduction will present the theme:

Our country has, and is developing, various elements of our defenses to insure national security, but it has not national civil defense. . . . Without a sound and effective system of civil defense, the people and the productive facilities of the country are unprepared to deal effectively with the results of an enemy attack on our country.

The report devotes 14 pages specifically to communications and radio broadcasting services in the civil defense plan. In this special chapter the note of apprehension is much less apparent than in other parts of the publication. For example, it is mentioned that communications are the "nerve system" of civil defense and that, in this country, it is "exceedingly efficient."

It is pointed out, however, that in wartime the system may be severely damaged in areas under heavy attack. Hence it is recommended that every contingency must be provided for and sound plans developed so that in such an emergency communications in some form will be available. "How to anticipate such problems should be the purpose of

civil defense communications planning in cooperation with authorities in the communications field," the report asserts.

Detailed suggestions are given on all points discussed. The report is for sale by the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C. Price \$1.

No FCC Gambling Investigation

THE Federal Communications Commission has declined to initiate an investigation of wire communication companies transmitting racing information. The California commission had requested such an investigation by FCC. In effect, the Federal agency replied that state commissions had sufficient power to handle the problems of transmission of horse-racing information to bookmakers in their own states. However, in order to insure continued surveillance of the matter by FCC, the agency did suggest that Bell system companies file statements describing their current policies.

Developments in Telephone Labor

THE Communications Workers of America (an independent union of telephone workers) is exploring actively the idea of affiliating with the American Federation of Labor or the Congress of Industrial Organizations. CWA leaders, with considerable support from the rank and file, would like the strength gained by such affiliation. However, and rather naturally, CWA would like to re-

PUBLIC UTILITIES FORTNIGHTLY

tain as much of its inherent power as it can. It does not care to be "swallowed." Hence, it is shopping for best terms possible.

If terms are not reasonably satisfactory to CWA, the union may decide to stay independent.

Most recent active step in this development was a conference between a CWA committee and William Green, AFL president, and Allan S. Haywood, CIO vice president. Results of this conference will be reported to the CWA executive board, which will make a recommendation to the membership regarding the advisability of affiliating with either AFL or CIO, or remaining independent.

Complicating factors are: (1) AFL has a union interested in telephone workers, the International Brotherhood of Electrical Workers (IBEW), headed by the well-known leader, Daniel W. Tracy; and (2) CIO now has its own Telephone Workers Organizing Committee, which has membership estimated between 50,000 and 80,000. CWA has about 173,000 members and claims to represent over 230,000 workers in the telephone industry.

From the above facts it is clear that some "deal" would have to be made which would result in "amicable relations" between the two affiliating unions. After CWA executive committee makes its recommendations, the question will be put up to members in a referendum vote.

SHOULD an affiliation result, compromises or changes in policy would become necessary. For example, CWA and AFL each have made some attempts to make their voice influential at rate hearings held by public service commissions in the various states. The general approach has been different in each union. AFL is inclined to support rate increases in order to make easier an increase in wage rates. This is consistent with AFL's general policies in the building industries. For instance, the AFL International Brotherhood of Electrical Workers has legally intervened in

favor of a telephone rate increase in Michigan. The union's petition to the Michigan commission states that higher rates for the Union Telephone Company are needed, not only to provide reasonable returns and good service, but also to enable the company "to deal fairly with its employees from time to time as new contracts come up for negotiation." The union claims to represent all plant and traffic employee organizations within the company's employment. This same union has intervened in favor of two other telephone company rate increases in Illinois during recent years.

CWA has not made any official announcements nor presented any legal petitions on the question, but it is known definitely that in two instances the union has informally given its views to state authorities. The essence of these views has not been revealed publicly, because the group does not wish to "tip its hand." Views of some of CWA's officials are known. They are inclined to oppose rate increases when the companies are making "comfortable" profits, and particularly in cases where labor has not been given "adequate" raises. In other words, the wage increases should come out of profits and other cost reductions rather than from higher charges to subscribers.

Another straw floating on this CWA wind is the fact that the union supports a minimum wage of \$1 an hour, even when small independent companies or their subscribers could not afford to pay such a wage. The CWA answer, in effect, is: "Let the government or the Bell system take over such companies and subsidize the added labor expense." These latter views have not been voiced officially, and may not represent the wishes of the rank and file. Time only will tell.

Annual Report of FCC

THE unprecedented expansion of radio, television, and other electrical communication media is summarized in a comprehensive word picture in the recent annual report of the

EXCHANGE CALLS AND GOSSIP

Federal Communications Commission. A few of the high lights of the report are of interest here:

The fiscal year 1948 emphasized the acuteness of the "housing" shortage which exists in the radio spectrum. It is becoming increasingly difficult to squeeze new stations into already congested bands, and to accommodate rapidly developing services. . . .

The general public is familiar with broadcasting because it enters the home. But it has little acquaintance with the more than 50 other classes of radio stations, equally important in providing more than a hundred diversified nonbroadcast services, which outnumber program stations by more than 30 to 1.

As of June 30, 1948, there were nearly 131,000 authorized radio stations of all types, not counting associated mobile stations. In addition, various radio-operator authorizations approximated 505,000. Thus the commission had over 635,000 radio authorizations on its books, which was an increase of about 85,000 during the year and more than three times the prewar number.

The commission said that the last half of the year witnessed a sudden surge in television (TV) applications and a leveling off of frequency modulation (FM) requests. Applications for new TV stations for the year almost equaled the number for new AM facilities; FM seekers were less than half the TV number.

Texas and California led all states in total outstanding broadcast authorizations in those three categories. The total number of broadcast stations in the United States is close to 4,000. Of this figure, 3,163 were major broadcast outlets—2,034 AM; 1,020 FM; and 109 TV. They represented a gain of 239 AM, 102 FM, and 43 TV stations.

SAFETY and special radio services, as their designation implies, are devoted largely to safeguarding life and property—on the land, sea, and in the air—but also cover utilization of radio for industrial and business purposes. The activities were under skyrocketing attention and development.

Numerically more than ten times larger than the broadcast service, the safety and special services saw nearly 11,000 new station authorizations during

the year, bringing their total to over 47,000. What is more, nearly 150,000 mobile stations were covered in these nonbroadcast services.

The largest increase was felt in the aeronautical field, which added nearly 5,000 radio stations, making a total of nearly 21,000. The marine services gained over 3,000 stations, for a total of 15,000. More than 600 ship radar installations attested to the growing use of that navigational aid.

Other important uses of radio for safety purposes include facilities for police and fire departments, railroads, and forestry. Industrial uses of radio were expanded by transit utilities (including taxicabs), electric and gas utilities, petroleum pipe lines, and lumbering interests.

Telephones

WHILE the activities of FCC concentrated on radio problems in 1948, it is not forgotten that the agency is vitally interested in the telephone and telegraph industries. Telephone regulation by the commission covers interstate and international service by the Bell system and 63 independent companies. A few facts on the telephone industry growth in 1948 have been selected from the FCC report to mention here.

For instance, the Bell system, which owns about 85 per cent of all telephones in use, handled over 36 billion conversations. New interstate wire and cable telephone construction amounted to \$127,000,000. Gross telephone investment exceeded \$8 billion.

The thirtieth million Bell telephone was installed in Iowa. This increased the number of Bell and independent telephones in service to more than 36,000,000. Some 2,200,000 of these instruments were in rural service. About 40 per cent of farm homes now have telephones. However, in three southern regions five out of six farms are still without this service. More than 65 per cent of all Bell telephones and 33 per cent of the independent telephones have been converted to dial operation.



Financial News and Comment

By OWEN ELY

Public Power Comparisons

WHILE the trend toward government development of power projects and public ownership of distributing systems received a definite setback in recent years, the proponents of public power are as active as ever, and the New Deal victory of November 2nd has lead to a resurgence of public power propaganda. For example the American Public Power Association, with headquarters in Washington, has issued an attractive 32-page brochure entitled "Public Power Pays!" The study was prepared by Carlton L. Nau, a former official of the Rural Electrification Administration and now general manager of APPA.

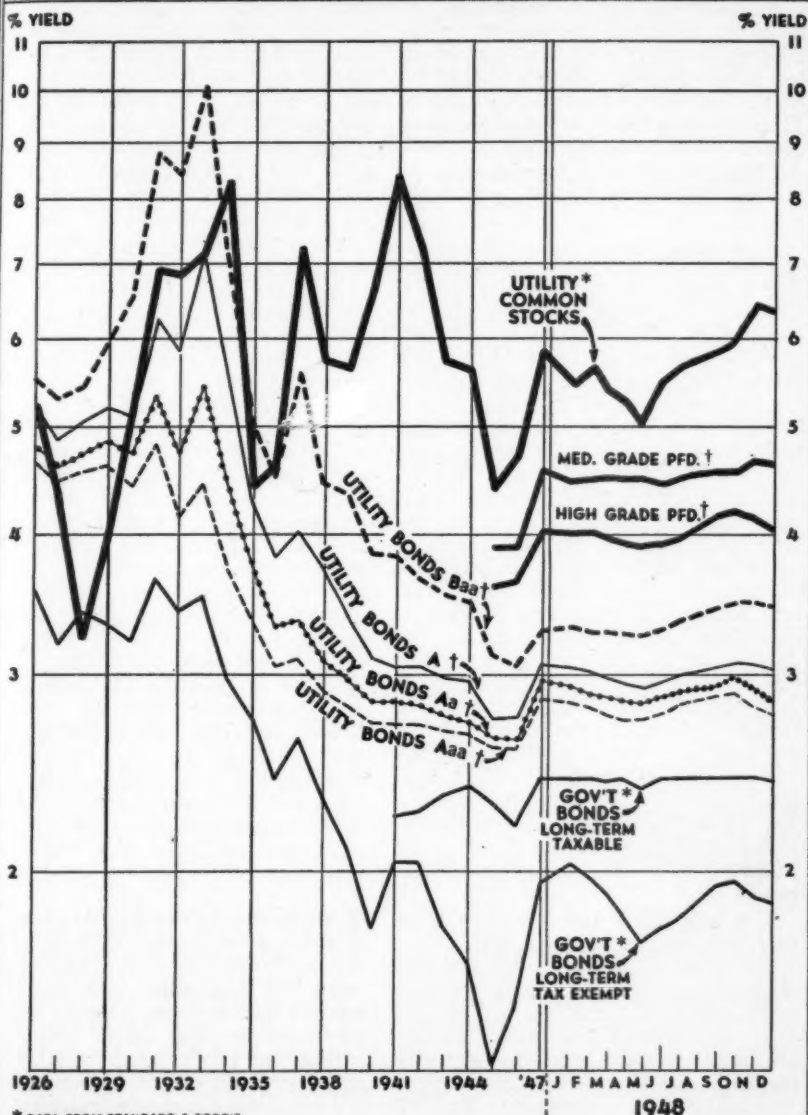
In this story we find the statement on page 4 that "The publicly owned systems, long known to have lower rates, are now shown, by the record, to pay proportionately more taxes, and to have better business management, than their privately owned counterparts." The statement about taxes is explained as follows: "Using the term 'taxes' to mean contributions to the support of government, the study shows that publicly owned systems pay 27 per cent of their total operating revenues for this purpose, compared with 19 per cent paid by the private utilities. In other words, the service systems pay over 40 per cent more than the profit systems for the support of government. This may be a surprising fact to those familiar with the alleged tax-discrimination charges of the private utilities."

IN the table on page 29 of the booklet, composite income accounts for public and private power systems are presented in parallel columns. We reproduce the same table herewith, except that all figures are stated in terms of the revenue dollar; i.e., the figures in each column are divided by the total revenues for the respective groups:

	Public Systems	Private Systems
Operating revenues ...	\$1.00	\$1.00
Less operating expenses	.50	.48
Depreciation .....	.12	.10
Taxes .....	.02	.19
Electric utility operating income ...	.36	.23
Add other utility operating income .....	.04	.02
Total utility operating income ....	.40	.25
Add other income ....	.02	.02
Gross income .....	.42	.27
Less interest on long-term debt, etc. ....	.09	.08
Net income .....	.33	.19
Dividends on preferred	—	.03
Dividends on common	—	.11
Surplus .....	.33	.05

How is the statement that "publicly owned systems pay 27 per cent of revenues for taxes" reconciled with the actual payment of only 2 per cent of revenues for taxes? The argument follows this line: The electric investment of the public systems is \$800,000,000 and the average 3 per cent return obtained from

UTILITY FINANCING COSTS HISTORICAL AND CURRENT YIELD TRENDS



PUBLIC UTILITIES FORTNIGHTLY

consumers to support this investment is estimated at \$24,000,000 (11 cents of the revenue dollar). Since 36 cents of the revenue dollar is left from electric operations, deduction of the theoretical 11 cents for "return on investment" leaves 25 cents which is considered equivalent to additional taxes, making a total of 27 cents. But why take carrying charges as 11 cents when they are actually only 9 cents? On this revised basis "taxes" would be 29 cents and, with miscellaneous income credited, they would rise to 35 cents.

BUT what happens when we apply similar operating conditions to private companies? It would then appear that the private utilities could lower their rates 17 per cent, if they paid only the same actual taxes as the public systems. Such a rate cut would amount to nearly \$560,000,000. On this basis the average price per kilowatt hour for private systems would be 1.36 cents compared with 1.42 cents for the public systems. And this, despite the fact that the private systems have to pay 6 per cent for their investment funds compared with an indicated average cost of only about 3 per cent for the public systems. Many municipalities can, in fact, finance at 1½-2½ per cent. In other words, according to this analysis, private companies operating under cost and tax conditions similar to those enjoyed by the public systems, could not only wipe out all low-rate advantage claimed for the latter, but seriously undersell them in the public interest. Viewed in this light, it is a fair question whether such an analysis is in favor of public as against private ownership or vice versa.

But is it really fair to take a large part of the income of the public systems and call it taxes? It is true that the money, or some of it, may be returned to the municipal treasuries, and as such is the equivalent of local tax income. Yet, the private systems pay taxes *not only* to the municipal treasuries, and as such *state and Federal governments*. In 1947 all electric companies paid state and local taxes of \$289,000,000 and Federal taxes

of \$368,000,000. No complete breakdown is available, but estimated amounts per dollar of revenue might be 5 cents local, 3 cents state, and 11 cents Federal (total 19 cents). Private utilities have to charge higher rates because of the taxes paid to state and Federal governments, which the municipal systems are not burdened with. They also have to pay two to three times as much for capital as the municipal systems. Here again they are paying tribute to the state and Federal governments, since the holders of their securities have to pay out a large proportion of the interest and dividends they receive to the Federal government, in the form of income taxes. (In some cases the state also levies an income tax.) The secondary or "double tax" feature thus explains in part the lower-cost advantage of public ownership financing, because holders of municipal bonds are scot-free of such levies. Making adjustment for this, the picture now works out as shown in table, page 169.

This would indicate that the private systems could reduce their rates about one-fifth if they and their security holders didn't have to pay tribute to the state and Federal governments, and their rates would then be much lower on a national average than those of the public systems, which do not have this burden.

So far as efficiency is concerned, the table shows that the public systems spend 62 cents out of their dollar for operating costs, or 7 per cent more than the 58 cents spent by the private systems. However, such a comparison doesn't necessarily measure relative efficiency, since rates average lower for the public systems.

HERE is another thought-provoking angle on costs. The American Public Power Association booklet concedes that the private companies can produce power more cheaply than the public systems. But claim is laid to large savings for public power in bookkeeping, advertising and promotion expense, bill collecting, etc. Space limitation here forbids detailed analysis of the components of these operating expense

FINANCIAL NEWS AND COMMENT

factors, but the obvious point that needs to be investigated is this: Are the accounts of all the public power departments kept on an accounting basis strictly comparable with those of the private systems? Isn't it possible, if not probable, that in many smaller municipalities there may be joint use of municipal facilities such as trucks, garages, warehouses, supplies, municipal employees' time, etc., so that the electric department may not be fully credited with its full share of the costs? This may provide one explanation for the wide variation in costs, and private industry organization might well be looking into the matter. Another explanation may lie in the much larger proportion of rural areas served by the private companies, which in-

creases operating costs. Still another angle of possible interest is the relative wage scales paid. If it were developed that private industry were paying higher levels of wages, labor unions might well be interested in any movement to expand the domain of the municipal plants.

Utility Convertible Securities

DURING the past year the electric utility companies have made less use of convertible securities — debentures and preferred stocks — to finance the construction program, than had been anticipated. Because of the difficulty in floating preferred stocks these days it is rather surprising that more convertible preferreds have not been issued. At present only two convertible securities seem to be contemplated — \$28,000,000 additional 15-year convertible debenture 3s which Consolidated Edison proposes to issue in exchange for new Long Island Lighting common stock, if the latter company's recapitalization plan is approved; and an issue of convertible preference stock recently proposed in the recap plan of Niagara Hudson Power.

In 1948 Public Service of Colorado retired its small issue of convertible debenture 3s due 1962, forcing conversion into common stock, and the company then issued about an equal amount of convertible \$4.40 preferred stock. Consolidated Gas of Baltimore obtained conversion of about half of its debenture 2½s, due to the change in the conversion privilege July 1st. Most recent convertible offerings were the debenture issues of Virginia Electric Power, Peoples Gas Light, and Detroit Edison, all of which proved popular. The Detroit Edison's are not convertible until two years from issuance; in the meantime the \$13,000,000 rate increase granted by the Michigan commission has moved the common stock to a level one point over the conversion parity. Because of the early 10-year maturity the bonds would be worth a substantial premium without the conversion feature.

The list on page 170 gives a com-

	Public Systems	Private Systems
Revenues	\$1.00	\$1.00
Operating costs .....	.62	.58
Balance .....	.38	.42
Other income .....	.06	.04
Balance .....	.44	.46
Paid to municipality...	.35*	.05est.
Paid to state	—	.04est. ¹
Paid to Federal government	—	.17est. ²
Balance .....	.09	.20
Paid (net after taxes) to—		
Bondholders .....	.08	.04
Stockholders	—	.09
Balance .....	.01	.07
Amortization, etc. ....	.01	.02
Surplus	—	.05 ³

*Some of this may be retained as surplus in water department accounts, or used to retire bonds, but such payments benefit the municipality.

¹ Estimated 3 cents in direct taxes, and 1 cent in taxes on income received by security holders.

² Estimated 11 cents in direct taxes, and 6 cents in taxes on income received by security holders. (It is assumed that security holders pay normal and surtaxes averaging about 30 per cent of their interest and dividend income, which is probably too low.)

³ Generally used for plant construction.

PUBLIC UTILITIES FORTNIGHTLY

plete tabulation of utility convertible securities. The last column on the right-hand side shows the current value of the common stock into which the issue is convertible as compared with the price of the debenture or preferred stock.

Common Stock Earnings Based On Average Shares Outstanding

IT has been customary to state common share earnings of utility companies on the basis of the current number of shares actually outstanding. This practice did no harm over a long period of years when common stock issues were quite infrequent. At the present time, however, with many companies issuing rights on a 1-for-5 or 1-for-10 basis, the restatement of earnings on the new diluted basis is apt to cause alarm to some stockholders, and raise questions regarding dividend policy.

For example, one large utility, Vir-

ginia Electric & Power, in November offered 739,128 additional shares on the basis of 1-for-4. After December 1st the number of shares increased from 2,953,000 to 3,692,771. Earnings for the twelve months ended November 30th on the new basis, would be only \$1.18 a share on the net number of shares, instead of \$1.47 on the previous number. This might tend to raise questions regarding continuance of the \$1.20 dividend rate. A much better way to state the earnings, therefore, is to use the average number of shares outstanding during the twelve months' period. Thus for the calendar year the number of shares would be only about 2 per cent higher instead of 25 per cent and the decline in the share earnings would be only 2 cents instead of 29 cents.

When senior securities are issued the results are obviously on an accrual basis, since the higher charges have been accrued only for the months in which the

UTILITY CONVERTIBLE SECURITIES

Where Listed	Amount (Mill.)	Debentures	1-12-49 Approx. Price	Present Conversion Privilege	Price Of Common	Value Of Conversion
O	\$ 9	Pub. Ser. of Ind. 2½ '62.....	106	50 shs.	21	105
S	276	Amer. Tel. & Tel. 2½ '61.....	103	1	150	100
S	186	Amer. Tel. & Tel. 2½ '57.....	109	2	150	100
O	8	Cons. Gas of Balt. 2½ '62.....	102	15	62	93
S	57	Cons. Edison 3 '63.....	106½	40	23	92
S	6	Laclede Gas 4½ '63.....	108½	160	5	80
S	12	Virginia Elec. 3½ '63.....	108½	60	16	96
S	16	Peoples Gas Light Deb. 3 '63.....	108	10	100	100
S	47	Detroit Edison Deb. 3 '58.....	106	50*	21	105
<i>Convertible Preferred Stocks</i>						
C	\$41	So. Cal. Edison 4.48% (\$1.12).....	28	.84	30	25
C	20	So. Cal. Edison 4.56% (\$1.14).....	29	.92	30	27½
O	8*	New Eng. Gas & Elec. 4.5% (\$4.50)	88	7	10	70
O	10	Gen. Telephone 4.40% (\$2.20).....	47	1½	25	33
O	2*	Cal. Elec. Power 5.5% (\$1.10).....	20	2½	7	18
S	21	Phila. Elec. \$1 Pref. Com.....	24	1½	21	18½
S	164	Pub. Serv. E. & G. \$1.40 Pref. Com.	27	1.1½	21	23
O	7	Public Service of Colo. \$4.40.....	107	2½	39	98
O	4	So. Carolina E. & G. 5½% (\$2.75)...	56	7	7½	53
O	6	Washington Gas Light \$4.25.....	95	3	25	75

S—Stock Exchange. C—Curb Exchange. O—Over-the-counter or out-of-town exchange.

* After 12/1/50.

1 Ten shares for each \$1,000 of debenture plus \$500 cash.

2 Ten shares for each \$1,000 of debenture plus \$400 cash.

3 To June 11, 1949; thereafter ½.

4 To June 30, 1951; reduced thereafter.

FINANCIAL NEWS AND COMMENT

securities are outstanding. Thus the effect on the common share earnings is not exaggerated. But to make similar adjustment for an increase in the common shares, it is necessary to use the "average shares" method in order to properly evaluate the earnings. Obviously since the new capital was not at work during the entire twelve months' period, it is unfair to saddle the earnings with the entire amount, except in special cases where *pro forma* results are desired.

ANOTHER instance where it may be advisable to use average shares is where a large issue of convertible securities is exchanged into common stock in a short time. This happened last year in the case of Consolidated Gas of Baltimore. Use of the average number of shares in such a case may be more debatable, since the funds obtained from the sale of the old convertible securities were invested in the property at an earlier date and the benefit to earnings should already be apparent. However, due to the suddenness of the increase in share earnings it seems advantageous to make the change gradually by using average shares. In our table on page 172 earnings of Consolidated Gas of Baltimore for the calendar year 1948 are stated as \$4.50 per average share (the management's estimate). Earnings for eleven months ended November 30th were reported by Moody's Service at \$3.91, with a footnote indicating that they would be equivalent to \$4.16 based on average number of shares.

SEC Views on Competitive Bidding

THE Securities and Exchange Commission, in its findings and opinion in the matter of financing Michigan-Wisconsin Pipeline Company by American Light & Traction, discussed the proposed sale of \$66,000,000 20-year 3½ per cent first mortgage pipe-line bonds at 100 to two insurance companies, Otis & Co., as proponents of competitive bid-

ding, opposed the institutional sale of the bonds and in rejecting its arguments the commission gave an interesting review of competitive bidding. The commission stated:

The competitive bidding rule was promulgated by this commission in 1941 in the face of strong opposition from many quarters. In the commission's opinion, the rule, has worked successfully and has greatly benefited investors and consumers. It has materially aided in the effectuation of the statutory purpose of securing "economies in the raising of capital," has diminished investment banker control over the electric and gas utility industry, and has promoted the carrying out of the divestment and simplification program of the act.

In promulgating the competitive bidding rule, however, the commission recognized that exemptions might be appropriate in particular cases and that to require competitive bidding under any and all circumstances would be foolhardy and unsound. The rule, therefore, specifically exempts certain defined types of financing and contains, in addition, general provisions for exemption, on application to the commission, where a showing can be made that competitive bidding is not appropriate in the particular case. It is under the latter provision that the commission has granted, in a number of cases, an exemption from the requirement of competitive bidding. In its administration of the rule, the commission has required proof, upon applications for exemption, that the particular financing does not lend itself to competitive bidding, but it has not hesitated to grant an exemption under appropriate circumstances.

THE commission's figures indicate that about 16 per cent of the bond issues and 26 per cent of the stock issues since May 7, 1941, have been exempted from competitive bidding. In the eighteen months' period from January 1, 1947, to June 30, 1948, only 22 per cent of the principal amount of bonds was exempted. However, during 1948 the proportion of exempted stock issues must have been considerably higher than during the approximate 7-year period ended June 30, 1948.

While the majority of Wall Street underwriting houses appear to be against competitive bidding in principle, there is less tendency to quarrel over application of the rule to high-grade bond issues.

PUBLIC UTILITIES FORTNIGHTLY

RECENT FINANCIAL DATA FOR PRINCIPAL ELECTRIC OPERATING COMPANY STOCKS

OPERATING COMPANY STOCKS										Price- Earnings Ratio
		1/12/49 Price About	Indicated Dividend Rate	Approx. Yield	Share Earnings				% In- crease	
					12 Mos. Ended	Current Period	Previous Period			
Revenues \$50,000,000 or over										
B	Boston Edison	42	\$2.80	6.7%	Dec.'47	\$2.75	\$2.53	9	15.3	
S	Cincinnati G. & E.	28	1.40	5.0	Sept.	2.85	2.84	—	9.8	
S	Cleveland Elec. Illum.	40	2.20	5.5	Sept.	2.98	2.46	21	13.4	
S	Commonwealth Edison ...	26	1.50	5.8	Sept.	1.73	2.08	D17	15.0	
S	Consol. Edison of N. Y.	23	1.60	7.0	Sept.	2.29	1.61	42	10.0	
C	Consol. Gas of Balt.	61	3.60	5.9	Dec.'48	4.50**	4.92	D 8	9.4	
S	Consumers Power	33	2.00	6.1	Nov.	2.47	2.30	7	13.4	
S	Detroit Edison	21	1.20	5.7	Nov.	1.49	1.52	D 2	14.1	
C	Duke Power	73	4.00	5.5	Dec.'47	6.29	8.17	D23	11.6	
S	Louisville G. & E.	24	1.60	6.7	Sept.	2.66	2.08	28	9.0	
C	Northern States Pwr.	9	.70	7.8	Sept.	.89	.93	D 4	10.1	
S	Pacific G. & E.	32	2.00	6.3	Sept.	2.36	2.38	D 1	13.6	
S	Penn. Power & Light	18	1.20	6.7	Nov.	2.29	2.04	13	7.9	
S	Philadelphia Elec.	21	1.20	5.7	Sept.	1.60	1.80	D11	13.1	
S	Pub. Service E. & G.	21	1.60	7.6	Dec.	2.00E	—	—	10.5	
S	So. Calif. Edison	30	1.50	5.0	Sept.	1.84	1.70	D 8	16.3	
S	Virginia Elec. Power	16	1.20	7.5	Nov.	1.44	1.67	D14	11.1	
Averages				6.2%					12.1	
Revenues \$25-\$49,000,000										
S	Carolina P. & L.	27	\$2.00	7.4%	Nov.	\$3.25	\$2.91	12	8.3	
O	Central Illinois P. S.	15	1.20	8.0	Sept.	1.73	1.80	D 4	8.7	
O	Connecticut L. & P.	53	3.25	6.1	Nov.	3.44	3.32	4	15.9	
S	Dayton P. & L.	28	1.80	6.4	June	2.24	2.46	D11	12.5	
S	Houston L. & P.	46	2.20	4.8	Nov.	3.52	2.75	28	13.1	
S	Illinois Power	26	2.00	7.7	Sept.	3.03	2.69	13	8.6	
O	New Orleans Pub. Serv.	34	2.25	6.6	Nov.	2.76	2.32	19	12.3	
O	North. Indiana P. S.	15	1.20	8.0	Oct.	2.09	1.94	8	7.2	
S	Ohio Edison	29	2.00	6.9	Nov.	2.53	2.48	2	11.5	
S	Potomac Elec. Power	14	.90	6.4	Sept.	.94	.88	7	14.9	
S	Pub. Serv. of Colorado	39	2.20	5.6	June	4.73	4.83	D 2	8.2	
O	Pub. Serv. of Indiana	20	1.50 ^{est.}	7.5	Nov.	2.63	2.19	20	7.6	
O	Puget Sound P. & L.	13	.80	6.2	Oct.	1.73	1.78	D 2	7.5	
S	Wisconsin Elec. Pr.	16	1.00	6.3	Sept.	1.59	1.78	D11	10.1	
Averages				6.7%					10.4	
Revenues \$10-\$24,000,000										
O	Atlantic City Elec.	15	\$1.20	8.0%	Nov.	\$1.45	\$1.35	7	10.3	
S	Birmingham Elec.	10	—	—	Nov.	1.18	1.56	D24	8.5	
O	Central Arizona L. & P.	11	.70	6.4	Nov.	1.54	.67	130	7.1	
S	Central Hudson G. & E.	7	.52	7.4	Sept.	.57	.63	D10	12.3	
O	Central Illinois E. & G.	18	1.30	7.2	Sept.	2.46	2.62	D 6	7.3	
O	Central Maine Power	16	1.20	7.5	Nov.	1.34	1.44	D 7	11.9	
S	Columbus & S. Ohio Elec.	38	2.80	7.4	Sept.	3.98	4.20	D 5	9.5	
O	Delaware P. & L.	17	1.20	7.0	Dec.	1.86	1.60	16	9.1	
S	Florida Power Corp.	14	1.00	7.1	Sept.	1.53	1.36	D13	9.2	
S	Gulf States Util.	17	1.20	7.0	Oct.	1.68	1.37	23	10.1	
C	Hartford Elec. Light	49	2.75	5.6	Dec.'47	2.90	2.97	D 2	16.9	
S	Idaho Power	35	1.80	5.1	Oct.	2.91	—	—	12.0	
S	Indianapolis P. & L.	23	1.50	6.5	Sept.	3.01	2.61	15	7.7	
O	Interstate Power	7	.60	8.6	June	.84	PF	—	8.3	
O	Kansas Gas & Elec.	23	1.60	7.0	Sept.	2.31	2.62	D12	10.0	
O	Kentucky Utilities	10WD	.80 ^{est.}	8.0	Oct.	1.36*	—	—	7.4	
O	Minnesota P. & L.	22	2.20	10.0	Dec.'47	3.40	2.88	18	6.5	
C	Mountain States Power	32	2.50	7.8	Sept.	4.98	3.78	32	6.4	
O	Oklahoma G. & E.	32	2.40	7.5	Sept.	3.47	3.65	D 5	9.2	
O	Portland General Elec.	24	1.80	7.5	Sept.	2.64	2.24	18	9.1	
O	Public Service of N. H.	24	1.80	7.5	Nov.	1.71	1.76	D 3	14.0	
O	San Diego G. & E.	13	.80	6.2	Sept.	1.01	.75	35	12.9	

FINANCIAL NEWS AND COMMENT

(Continued)

	1/12/49 Price About	Indicated Dividend Rate	Approx. Yield	12 Mos. Ended	Share Earnings Current Period	Previous Period	% In- crease	Price- Earnings Ratio
S Scranton Electric	13	\$1.00	7.7%	Nov.	\$1.14	\$1.27	D10	11.4
S South Carolina E. & G.	7½	.50	6.7	Sept.	1.15	.54	113	6.5
O Southwestern Pub. Serv. ..	28	2.00	7.1	Oct.	2.69	2.54	6	10.4
C Tampa Electric	26	2.00	7.6	Nov.	2.03	2.40	D15	12.8
C Utah Power & Light	22	1.60	7.3	Nov.	2.52	2.44	3	8.7
O Wisconsin P. & L.	14	1.12	8.0	Sept.	1.35	1.40	D 3	10.4

Averages

7.3%

9.9

Revenues under \$10,000,000

O California Oregon Power .	24	\$1.60	6.7%	Nov.	\$2.73	\$1.62	41	8.8
O El Paso Electric	26	1.60	6.2	Nov.	2.96	2.65	12	8.8
S Empire Dist. Elec.	15	1.12	7.5	Sept.	2.39	1.80	33	6.3
O Madison Gas & Elec.	22	1.60est.	7.3	Sept.	1.72	1.92	D10	12.8
O Northwestern Pub. Serv. ..	8	.50	6.3	Sept.	1.22	1.37	D11	6.6
C Penn. Water & Power	40	4.00	10.0	Dec.'47	4.32	4.73	D 8	9.3

Averages

7.7%

9.0



RECENT FINANCIAL DATA FOR PRINCIPAL ELECTRIC HOLDING COMPANY STOCKS

	1/12/49 Price About	Indicated Dividend Rate	Approx. Yield	12 Mos. Ended	Share Earnings Current Period	Previous Period	% In- crease	Price- Earnings Ratio
<i>Integrated Holding Company Systems</i>								
C American Gas & Elec.	39	\$1 & Stock	6.0%	Nov.	\$4.24	\$4.05	5	9.2
C Central & South West	11	\$.80	7.3	Sept.	1.46	1.29	13	7.5
S New England Elec. System	8½	.80	9.4	Dec.'47	1.35	1.48	D 9	6.3
O New England G. & E.	10	.80	8.0	Nov.	1.30	—	—	7.7
S West Penn Elec.	15½	1.00	6.5	Sept.	3.50	3.04	15	4.4

Averages

7.4%

7.0

Systems in Process of Integration

Common Stocks—Dividend Paying

C American L. & Tr.	19	\$1.20	6.3%	Sept.	\$.62	\$1.74	D64	30.6
C Cities Service	46	2.00	4.3	Dec.'47	10.93	6.41	71	4.2
C Electric Bond & Share	12	.25	—	—	—	—	—	—
S General Pub. Utilities	12	.80	6.7	Sept.	1.91	2.05	D 7	6.3
S North American	16	Cash & Stock	—	Sept.	1.86	—	—	8.6
C Philadelphia Co.	12	.70	5.8	Sept.	.88	.56	57	13.6
S United Gas Imp.	19	1.30	6.8	Sept.	2.00	2.13	D 6	9.5
C United Lt. & Rys.	22	Stock	6.6	Sept.	3.36	2.98	13	6.5
O West Penn Power	31	2.20	7.1	Sept.	2.40	2.15	12	12.9

Averages

6.2%

11.5

Common Stocks—Nondividend

S American P. & L.	8½	—	—	Oct.	\$4.52	\$3.85	17	—
S Commonwealth & Southern	3	—	—	Nov.	.59	.63	D 6	—
S Electric P. & L.	22	—	—	Nov.	6.01	4.29	40	—
S Inter. Hydro-Elec. "A"	5½	—	—	—	—	—	—	—
C Long Island Lighting	½	—	—	—	—	—	—	—
C Middle West Corp.	7	—	—	—	—	—	—	—
O New England Pub. Serv. ..	3½	—	—	—	—	—	—	—
C Niagara Hudson Power	7½	—	—	Oct.	1.56	PF	—	—
C North American L. & P. ..	8	—	—	—	—	—	—	—
S United Corp.	2½	—	—	—	—	—	—	—

B—Boston Exchange. C—Curb Exchange. O—Over-counter or out-of-town exchange. S—New York Stock Exchange. PF—Pro forma. Est.—Estimated. WD—When distributed.

*Pro forma, including additional shares to be sold to Middle West.

**Estimated on average number of shares.



What Others Think

Value of Western Electric to Telephone Users



THE recent filing by the U. S. Justice Department of antitrust proceedings against Western Electric Company to divorce it from control of the American Telephone and Telegraph Company has focused attention on the development and value of this equipment supply subsidiary to the Bell system. The idea of an operating utility or group of utilities developing such a subsidiary as a reliable source of standardized equipment or supply is not new. Railroads and electric utilities own coal mines, and some holding companies in the gas and electric field have developed their own service organizations. Admittedly, Western Electric has played a great part in giving America the best and most telephone service in the world. This problem is whether to break up this efficient group to get more competition or consider regulating its relations with the operating companies in the public interest. (See, also, page 184.)

Of fundamental interest in this connection is an article in the *Bell Telephone Magazine*, autumn, 1948. It is entitled "How Western Electric Serves Telephone Users." It was written by Clifton W. Phalen, who is AT&T vice president in charge of public relations. A few words about his background are of interest here.

Mr. Phalen joined the New York Telephone Company about twenty years ago as a lineman, and within the next ten years he had progressed through that company's plant department to become division construction superintendent of the eastern division. He became division plant superintendent in the same division in 1939, and in 1943 made the shift to the personnel department as assistant vice president. There he became vice president

in 1944, and his transfer to vice president in charge of public relations of the New York Company preceded by three years his election to a similar office in AT&T.

LEADING Mr. Phalen's story is the statement "As an Integral Part of the Bell System, Our Manufacturing and Supply Unit Has a Vital Share in Providing the Best Telephone Service at the Lowest Possible Cost."

The article is well written and clearly organized. A brief condensation of its chief points follows:

Speed

Telephone service has been provided to the greatest number of people with the greatest possible speed.

The Bell system has served millions of people far more rapidly than could possibly have been done if the system had not had its own manufacturing and supply company.

By 1947, Western had turned out more than five times as much dial central office equipment as in an average year before the war; nearly ten times as many manual switchboards, and more than three times as much cable and wire.

Uniform Standards

As a practical matter, the design, manufacture, and operation of standard telephone equipment can be best accomplished when the designers, the makers, and the operating people work closely and continuously together on the same team. Uniform standards make this possible. The identity of interest and singleness of purpose assure the production of high quality, standard equipment as no other manufacturing arrangements could.

WHAT OTHERS THINK

The equipment must be economical to use and easy to maintain, and the manufacturer cannot cut corners on quality for the sake of reducing his costs or increasing profits.

Constant and Dependable Service

Unusual demands for service must be met. Emergencies present difficulties. Western is invaluable in this connection. As a unit of the Bell system it maintains a coast-to-coast warehousing and distributing organization which is set up especially to meet the day-to-day needs of the telephone companies for apparatus and materials. These nation-wide stocks of supplies are invaluable when emergencies occur.

Scientific Progress

To meet the Bell operating companies' needs, Western Electric turned out some 47,000 different designs in 1947, and is ready at any time to make almost as many more for replacement or repair of apparatus already in use.

The result is that the operating companies can take full advantage of the steady improvement in the telephone art; they can continuously and efficiently introduce new equipment that fits in and works well with the old, and can avoid making costly large-scale plant replacements ahead of the time when it is economical to do so.

These economies to the telephone companies may mean a loss in business to Western Electric—for example, because fewer replacements may be needed in the future, or because more service can be rendered with relatively less equipment. But in this way, Western helps the operating companies to get the most out of technological progress, and make the maximum improvements and savings available to telephone users.

Costs

THE relationship between Western Electric and the Bell system means that Western shares in the system policy of trying to give the best service at lowest cost. In fact, the basic reason why

Western is a part of the system is to insure that the manufacturer will center on meeting the needs of the customer, rather than on doing business in the way that will be most profitable to the manufacturer. Types of equipment must be and are produced that result in operating economies to the telephone companies, and hence in economies to the user.

Western Electric's prices to the Bell system companies are substantially lower than the prices charged by other manufacturers of telephone equipment. Prices to Bell customers since the war have gone up much less than the rise in prices generally.

In June, 1948, Western's prices on the products it makes were up on the average only 16 per cent over the average price level for Western-made products in the years 1935-39. This small increase is far less than the average rise of 75 per cent in the prices of all manufactured goods.

Profits

Over the years the profits have been very reasonable. In the entire period from 1925 through 1947, Western earnings averaged 7 per cent on its net investment.

This is the average of the good years, when earnings were higher, and the poorer years, when earnings were lower or losses were suffered. Compared with Western's 7 per cent average, in the same period the 50 largest manufacturing companies in the country, operating in competitive markets, earned an average of 8.7 per cent on net investment.

Another way to look at profits in a manufacturing and distributing business is as a percentage of total sales. During the period 1925-1947, Western's earnings were only 3.5 per cent of sales, compared with 5.8 per cent for the 50 largest manufacturers.

From the record it appears that Western Electric profits have been no more than reasonable, and that the operating companies of the Bell system have obtained at reasonable prices the equipment they need to give the public good telephone service.

Annual Reports of Western Massachusetts Electric Company

NOT many utility companies handle their annual reports in the manner used by Western Massachusetts Electric Company, with offices in seven cities in its service area, and the main office in Boston. This company has divided its essential problem into two parts.

First, it presents its usual conservative annual report based on straight factual and accounting material. Even this study, in black and white, bows slightly to the current trend of color by including a map of the territory served and one page of six neat small charts carrying a dash of color.

Second, the company, possibly realizing an overly conservative attitude in the past on this point, decided in 1948 to send stockholders a separate booklet designed especially for nonresident shareholders who previously had been given little opportunity to form a physical picture of the company and the area it served.

That pictorial analysis of Western

Massachusetts Electric is entitled "The Power of Western Massachusetts," and it contains 52 pages of attractive pictures and charts, with a minimum of text. The charts are simple, artistic, and each carries a clear story needing no explanation. In the main section of the booklet the typical 2-page spread consists of a full-page picture in black and white on the right side, and about a half a page of descriptive text facing on the left-hand page.

In addition to a favorable reaction from stockholders, the company reports that it has received requests in appreciable volume from brokerage firms throughout the country for additional copies.

More aggressive than either of the above publications is the company's 26-page booklet selling Western Massachusetts as an ideal location for new industries. It contains several unique features not found in similar publications of other utility companies.

The All-electric Kitchen Program

EDISON ELECTRIC INSTITUTE explains its all-electric kitchen program.

"If all kitchens in wired homes were electrified according to today's standards, the additional electric appliances needed would represent a retail market of \$35 billion; operation of these appliances would require more than 165 billion kilowatt hours per year; and they would provide an added annual electric service revenue of over \$2½ billion. And these figures, big as they are, include only the major appliances—the range, water heater, refrigerator, dishwasher, garbage disposer, and home freezer. Small appliances and good lighting would add substantially to these figures."

Above is the opening paragraph of an address made by Harry Restofski, chairman of the commercial division, general

committee, Edison Electric Institute. This speech, entitled "The All-electric Kitchen Program," was presented at the general sales conference, Southeastern Electric Exchange, Atlanta, Georgia, November 11, 1948.

Very early in his discussion, Mr. Restofski makes it very clear that the program is most important for a reason other than the presence of a gigantic market of profitable business. The most compelling reason for action is the competition of other industries, gas and liquefied petroleum. That point is emphasized powerfully by this sentence: "There are competitive forces hard at work attempting to destroy the trend toward the electrical way of living."

The point is pressed further by the assertion that the current efforts of

WHAT OTHERS THINK



"BUT PRESIDENT TRUMAN SAYS THAT EVERY AMERICAN MUST HAVE A CHANCE TO OBTAIN HIS FAIR SHARE OF OUR INCREASING ABUNDANCE"

the competitors are basically strong for two reasons. "They are unified in their effort to coordinate all branches of the gas (or LP-gas) industry, and they depend upon the inability of the electrical industry to unite in a cooperative movement to sell the advantages of electrical living as against gas."

Mr. Restofski does not pull his punches in proving the case with specific

examples. That part of the address doesn't make soothing reading for those engaged in the business of generating electric power.

So, let's turn to the speaker's constructive suggestions.

Short selected quotations from the speech will give the idea:

To meet this need for an electrical industry program, the electric kitchen and

PUBLIC UTILITIES FORTNIGHTLY

laundry committee of the Edison Electric Institute has developed the first part of a complete national consumer activity to sell a method of living—the electric way.

The All-electric Kitchen Program is the initial start of a long-range activity. It has been developed and geared to supplement the electrical appliance manufacturers' national advertising, which features brands at the consumer levels, and to complement the NEMA industry promotions at the trade levels. Its first phase is a hard-hitting consumer campaign based on electric living, and has as its immediate goal—consumer education.

The entire All-electric Kitchen Program is built around the electrical industry's powerful new slogan—"Of Course—It's Electric."

In condensed form, there are presented here some of the program ideas explained by Mr. Restofski:

1. The EEI will exert every effort with electric appliance manufacturers for their adoption of this electrical industry slogan.

2. The spearhead of the program is a 40-page book (6½" x 9") known as the "Kitchenizer's Digest." It contains facts, figures, and definite suggestions on color,

decoration, equipment, arrangement, financing, planning, and other considerations relating to the installation of an all-electric kitchen.

3. Suggested ways to obtain low-cost distribution include newspaper ads, radio spot announcements, outdoor posters, regular customer contacts. Other good means for obtaining controlled distribution are at women's club and other meetings, cooking schools, home economics classes, utility displays and exhibits, home shows, and model homes. EEI supplies the basic materials.

4. A 27-minute color motion picture, "The Constant Bride."

IN the case of the "Kitchenizer's Digest" the production cost for 100,000 copies is 21 cents each. In lots of 500,000 it is 10 cents each. In the case of the motion picture, the original contract cost of production is \$37,000 for the master print. The cost of copies will depend upon the number purchase on the first order.

Kansas City Kilowatts

THE mayor and city council of Kansas City, on September 7, 1948, called upon the Kansas City Power & Light Company to make a report on the company's existing and anticipated problems "as related to the fulfillment of our obligations to the citizens of this community." Such an interesting and informative report was prepared that the company's president, H. B. Munsell, hit on the novel idea of making up copies for his own employees. In his letter of introduction he said in part:

It occurred to me that this report contains much data which should be of prime interest to the employees and their families, and I am taking the liberty of asking you to read the attached copy. If you have any questions concerning any phase of the report, please feel free to call on me.

The report is 32 printed pages in length, and the important ideas presented are too numerous to discuss here. How-

ever, the subject headings scattered throughout the booklet give a concise picture of the situation without need for supporting facts. These headings are:

- Impossible to Get New Equipment during the War
- All-time Peak Load in August, 1948
- Complete Two Major Installations at Grand Avenue
- Other Power Producing Facilities on Order or under Construction
- Two New 60,000-kilowatt Turbo-generators by June, 1951
- Forecast Peak Demands for 1948-1951
- Unusual Conditions May Affect Peak Demands
- All Companies to Benefit by Interconnecting Lines
- Southwest Power Pool May Offer Tie-in Possibilities
- Enlarging Transmission and Distribution Facilities
- New Substations Necessary for Expanding Service
- Underground Network to Cost Approximately \$3,000,000
- Make Plans to Handle Future Load Growth

WHAT OTHERS THINK

Plan 165 Circuit Miles of Overhead Extensions in 1948

Working to Modernize Street Lighting

Street Lighting Revenues Show Loss

Skilled Man Power a Major Problem

Only Small Number of Customers Waiting for Service

Expect to Speed up Installation of Transformers

Raise \$20,000,000 to Finance Construction Program

Steam Operation Losing Money

Higher Operating Costs May Force Increase in Rates

The supporting text is as pointed, honest, and clear as the above headlines. No doubt Mr. Munsell has received favorable comment from many sources. The address of the company is 330 Baltimore avenue, Kansas City 10, Missouri.

Selling a Granted Rate Increase

JUST to make things more difficult, we understand on good authority that utility rate increases must be sold to the public not only before they are granted but also after they are granted.

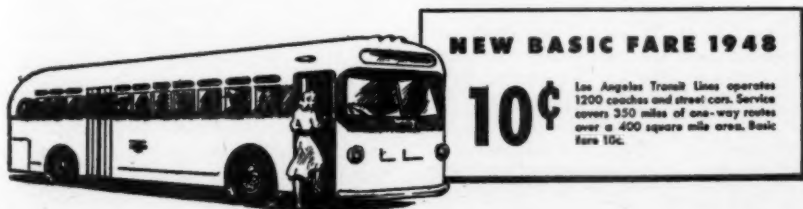
The Los Angeles Transit Lines, 1060 South Broadway, Los Angeles 15, believes this to be true. G. G. Gifford of that organization thinks that executives of other utilities would be interested in an advertisement his company

used in connection with its recent fare increase.

He states that in his opinion the frankness and simplicity of the ad accomplished wonders in public relations. Criticism against the advanced fare, at the moment, is practically negligible, he says.

Limited space here does not permit a reproduction of a sizable portion of the ad. However, a few comments on its

Why the Los Angeles Transit Lines Was Granted a Fare Adjustment



PUBLIC UTILITIES FORTNIGHTLY

contents are warranted. The 2-line lead read "Why the Los Angeles Transit Lines Was Granted a Fare Adjustment." Then with neat and simple illustrations it was explained that the original fare in 1874 was 10 cents, and that the new basic fare in 1948 still was 10 cents. A new zone fare schedule was approved by the public utilities commission of the

state of California, effective November 20, 1948.

Following this explanation were discussions on the following topics: (1) increased expenses, (2) decreasing revenues, (3) added service, (4) comparison of fares and living costs, and (5) comparison of fares with other cities.

—G. M. W.

Private Ownership Favored by Utility Union

At the Utility Workers Union (CIO) convention held at Washington, D. C., in October there was evidenced a desire to support business-managed public utilities in preference to publicly owned projects. This sensitiveness to the dangers of socialization took the form of definite resolutions adopted by the 400-odd delegates. The group had previously shown some sympathy for public ownership policies.

The resolutions passed were: (1) Endorsement of private ownership of public utility companies as long as responsible management and good labor-management relations exist. (2) Union opposition to tactics designed to drive public utilities into public hands or "any unfair acquisition of privately owned utility" through condemnation or confiscation. (3) Suspension of officers in four Communist-dominated locals in California. (4) Full acceptance of "the American concept of democracy" and preservation of the "American way of life." Other resolutions adopted were more in line with prevailing union thought: repeal of the Taft-Hartley Act; price control restoration to halt inflation; progressive taxation; and amendment or repeal of state utility labor laws.

The Utility Workers' resolutions on ownership of utilities are at considerable variance with the stand taken by the CIO Political Action Committee. The latter group has published a 179-page book entitled "Speakers' Book of Facts," and it has been distributed by the Utility Workers Union. This book confines its statements on utilities to 3½ pages sup-

porting the Tennessee Valley Authority. It attacks the refusal of Congress to give TVA \$4,000,000 to begin work on a steam plant at New Johnsonville, Tennessee. Achievements of TVA were praised, and the "power lobby" denounced. No statements regarding utility ownership appeared in the annual report of the officers and executive board of the Utility Workers Union to delegates at the convention. This report did condemn utility labor legislation in states, and it strongly advocated political action.

"POLITICAL action" received considerable attention from speakers at the Utility Workers convention. The principal speaker was Assistant Secretary of Labor John W. Gibson, a former Michigan CIO official who aided in the unionization of Michigan utilities before he came to Washington. Gibson attacked the 80th Congress and the Taft-Hartley Act. He said that "politics is a serious business," and that he was obliged to conclude that "legislation is either for you or against you—there is no middle road." Referring to state utility antistrike laws, he conceded that a strike does create chaos, but he decried the lack of an "adequate substitute for the right to strike." Numerous other speakers stressed the "vote right" idea.

The financial statement of the Utility Workers Union for the year ended June 30, 1948, indicates that the paid membership list numbers about 28,000. Total income for the year was \$306,000; expenditures about the same, with the

WHAT OTHERS THINK

largest amount, \$137,000, paid out for regional organizational expenses. Total assets were \$127,600, mostly in cash and U. S. savings bonds.

The American Federation of Labor has taken pains to compliment the utilities on their treatment of labor. The organization asserts that utilities and railroads stand alone among American industries in their general attitude on the relationship of wages to prices. In the October issue of *Labor's Monthly Survey*, published by AFL, comparative statistics were given for different industries from 1939 through 1947. They were analyzed in detail. The study concludes that in the case of utilities and railroads the proportion of the value of services produced which were paid for wages increased over the 9-year period. During the same period, the part remaining for profits declined. The report mentions that in utilities the average price per kilowatt hour of electric current sold has declined steadily since 1939, while wages have risen. Quoting: "Yet because the industry has cut costs and improved efficiency by installing new machinery, profits are satisfactory. Out-

put per man-hour has increased 36 per cent since prewar." The survey cited the industry as an exceptional example of efficient operation, offsetting necessary increased wages.

WITH respect to the telephone industry, the president of the Communications Workers of America, Joseph A. Beirne, takes a contrary view. CWA represents about 230,000 telephone workers throughout the country, more than one-third of the total. Mr. Beirne recently said, "If the Bell system seeks to persuade rate regulatory bodies to grant them excessively large profits, CWA will be forced to modify present nonintervention policy and appear before rate commissions asking them to deny company requests." It is known that some groups within the CWA have been talking about the advisability of advocating ownership of the telephone system by the Federal government.

However, it has been learned on good authority that there is no general consensus at this time on that question within CWA.

Valuable Employees' Handbook

OHIO PUBLIC SERVICE COMPANY has prepared a handbook for employees which many utility executives would enjoy reading. It is entitled "You and Your Company." Persons acquainted with the company's president, R. E. Burger, can recognize his philosophy and personality running through the entire 44-page booklet.

The brochure explains to the employee his current opportunities, possibilities for advancement, and the benefits available. Remarks on the responsibilities accompanying employment are included. The second half of the booklet is devoted to a brief description of the company's operations. Every double-page spread contains at least one interesting and attractive photograph in black and white. Color is employed for borders and back-

ground for headlines. The type of treatment of textual material is illustrated below. Under the heading "Your Opportunities" there are the following three paragraphs:

It is the policy of the OPS to fill vacancies through the promotion of its employees. It has long been in force. Employees with good records who qualify are given first consideration. Everyone has a chance to advance.

The company's growth through more than a quarter of a century has been steady and great. As it grew, new departments were created. This required experienced supervisors and employees. They were trained and developed in the OPS family whenever possible.

The company is still growing. This growth, therefore, is creating new openings. Furthermore, as the older employees retire, their positions are filled by qualified OPS employees. Thus, an endless chain of ad-

PUBLIC UTILITIES FORTNIGHTLY

vancement is set up that means better jobs with greater compensation.

"SECURITY with Opportunity" is the following heading, and the single paragraph dealing with that subject is so well stated that not to quote it here would represent a serious omission:

Opportunity is one thing, security another. Frequently, security vanishes in times of economic adversity. Electric service, however, has become so essential to modern living that even during economic recessions electricity is in demand when other services and commodities are curtailed or dispensed with. That is why a job with the Ohio Public Service Company is more secure than one with most other business establishments.

Lack of space here does not permit further quotations, but the remaining content of that part of the booklet devoted to the employee specifically is portrayed by the following subject head-

lines which indicate a broad coverage:

Your Responsibilities	Education and
Your Job and Your	Training
Income	Fraternities and
Hours, Vacations,	Sororities
and Holidays	Service Pins
Employment of Rel-	Credit Union
atives, Marriages	The Delta, publica-
Your Health	tion
Your Insurance	Suggestion System
Your Safety	Customer Relations
General Safety Com-	
mittee	

The remainder of the booklet, a little over one-half, is devoted to a brief history of the company expanded to explain the nature and extent of current operations, giving some attention to all important departments. On the last page a well-drawn map of the territory served is presented in attractive colors.

The Ohio Public Service Company's main office address is 1400 Hanna building, Box 6058, Cleveland 1, Ohio.

Notes on Recent Publications

Gas Sales in Illinois. The Illinois Commerce Commission, the utility regulatory agency of the state, has published a 31-page research report on 1947 sales of Illinois gas utilities. The analysis presents a comparison of 1947 gas sales with those for the year 1946, for the 12 largest public utilities furnishing gas service in the state. The companies account for approximately 99 per cent of total sales in the territory. Basic summary tables give data for total operating revenue classified by class of service, such as residential, commercial, and industrial. Figures are shown also for therms produced and the average number of customers, each classified by type of service. The remaining statistical tables deal primarily with similar data for the individual companies. Research Bulletin No. 44. Illinois Commerce Commission. Research and Statistics Division, Engineering Section, Springfield, Illinois.

Utility Financing Picture Bright. Ebasco Services Inc., has published a 44-page booklet asserting that the electric utility industry should have no major problems in financing the \$6 billion expansion program during the next four years. In fact it claims that the industry could finance a considerably larger expansion if it were called upon to do so. The main conclusions of the booklet, with supporting data, were presented in preview

form in the August 26th issue of PUBLIC UTILITIES FORTNIGHTLY. Harold H. Scaff, vice president, Ebasco Services Inc., wrote the article entitled "Electric Utility Stocks Are Better Than Ever." The report removes doubts expressed in some quarters regarding the ability of the industry to carry out the expansion program without straining its financial resources. Ebasco says that these doubts stem from the following: (1) inflationary pressures on costs and their effect on income which have made other public service industries seek substantial rate relief; (2) the apparent slowness of growth of operating income during the last two decades; (3) lack of understanding, both of the market potential inherent in the utility business and of the general effect which the construction program should have on the operating costs of the industry; (4) fear of adverse action by regulatory bodies. Three other important points to consider in appraising the earnings outlook are discussed in detail—depreciation, taxation, and dynamic growth. The conclusions are well supported by statistics and charts. ELECTRIC UTILITY FINANCING, Ebasco Services Inc., 2 Rector street, New York 6, New York.

Determining Reasonable Rates. Citizens Utilities Company, 125 East Putnam avenue, Greenwich, Connecticut, has prepared a 10-

WHAT OTHERS THINK

page memorandum with charts which it uses in both informal and formal rate proceedings. The contention of the presentation is that what is a reasonable rate of return for any individual utility company is different from what a reasonable rate of return is for any other company. Citizens Utilities has net earnings of about \$364,000 and total capital of \$8,025,779, including bonds, income notes, common stock, and surplus. The company holds that the proper interpretation of what investors are willing to pay for the securities of a company which are issued and outstanding is the measure of the only rate of return basis on which investors would be willing to provide the company with additional funds.

The main feature of the presentation is a statistical formula for determining the rate of return necessary to market additional securities. The final step in the calculation is given here to indicate the method used:

First mortgage bond, 56.07% of total capitalization, multiplied by 4.06%, yield to maturity	2.28%
Income notes, 12.78% of total capitalization, multiplied by 5.11%, yield to maturity	0.65%
Equity (total common stock, capital surplus, and earned surplus), 31.15% of total capitalization, multiplied by 18.19%, earnings yield basis	5.67%

Composite rate of return basis on which the capitalization of Citizens Utilities Company sells at current markets 8.60%

The final conclusion may be summed up as follows: Since 8.60 per cent is the current basis on which investors are willing to buy existing securities of the company, this is the percentage the company must earn on its in-

vestment in plant and equipment in order to raise new capital.

Census Publications. The Bureau of the Census has published a 250-page book called CENSUS PUBLICATIONS, 1947, Catalog and Subject Guide. All publications issued during the calendar year are included under one of the following subject headings: Agriculture, Business, Foreign Trade, Governments, Industry, Population, and Miscellaneous. The main body of the book is the subject guide in which information is given regarding all of the publication dealing with a particular subject, such as, "bookbinding" or "Idaho." The book is for sale by the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C.

Venting Direct Gas Heaters. The successful disposal of combustion gases from gas-fired appliances to the outside atmosphere is a problem discussed in detail in a 68-page research booklet published by Purdue University, Lafayette, Indiana. The bulletin is known as Research Series No. 103, Engineering Experiment Station, and its title is "Research in Venting Direct Gas Heaters When No Chimney Connections Are Available." The authors are C. E. Blome, research associate, and J. L. Bray, professor of metallurgical engineering. The booklet analyzes and appraises the problem, particularly as it concerns space, and it discusses in detail many illustrated examples with the object of pointing out why installations sometimes fail and what can be done to overcome these conditions. Copies are available at \$1 a piece postpaid from American Gas Association, 420 Lexington avenue, New York 17, New York. The association is sponsoring a general study of gas appliance venting practices and conditions.

Canadian Hydro Development

THE "Census of Industry 1946 Central Electric Stations in Canada" shows that the potential water power of the entire Dominion, which would make available 24-hour at 80 per cent efficiency, amounts to 25,722,900 horsepower at the ordinary minimum flow. Estimated on the basis of ordinary 6-month flow this total potential rises to 40,124,100. As of the end of 1947, approximately 10,490,923 horsepower was being developed through turbines installed. This percentage of development is considerably higher than the amount estimated in PUBLIC UTILITIES FORTNIGHTLY, issue of January 6, 1949 (page 39), which placed Canadian development at less than 8 per cent of an approximate total potential of 18,000,000 horsepower.



The March of Events

In General

U. S. Sues to Divide Western Electric

THE U. S. government last month sued to force the American Telephone and Telegraph Company to give up ownership of Western Electric Company, Inc., and much of its control over 21 Bell telephone operating companies.

The suit seeks a separation of Western Electric from AT&T and the dissolution of Western Electric into three competing manufacturing firms.

The Justice Department asked the court to require AT&T and all Bell operating firms to buy their telephone equipment only on a competitive bidding basis. AT&T and Western Electric also would be required to license their patents to all applicants at reasonable royalties and to provide technical assistance to firms making use of these patents.

Attorney General Clark said the suit, which was filed in Federal District Court at Newark, New Jersey, was instituted after consultation with the Federal Communications Commission.

The complaint charged that Western Electric, a wholly owned subsidiary of AT&T, manufactures and sells 90 per cent of all telephones, telephone apparatus, and equipment sold in the United States and that a substantial part of the remaining 10 per cent is produced under direct control of Western Electric.

The complaint proposed that Western Electric be separated into three companies "in such a way that two of them shall each be capable of manufacturing a full line of telephones, telephone apparatus, and equipment, and the third

shall manufacture special products not used exclusively in telephones."

The case has been many years in preparation and is expected to face a long and bitter court battle.

Leroy A. Wilson, president of AT&T, in commenting on the recent action of the Justice Department, said:

Western Electric has been a part of the Bell system for over sixty-five years, having manufactured the system's telephone equipment since 1881. Over these years, it has been the telephone users who have benefited most from this relationship. Moreover this relationship has been of extreme importance to the country's national defense in World War I and especially in World War II.

Mr. Wilson stated that he was sure the existing arrangement would be found to be in the public interest when all the facts are known. "Looking at the record, it is obvious that it would be the public and the telephone users who would suffer most if there were to be any change."

Survey Refutes Shortage Charge

REFUTATION of claims that a critical power shortage exists was implicit in an Edison Electric Institute survey completed last month and based on post year-end reports from 90 per cent of the electric industry. This percentage was said to comprise practically all the privately operated companies and most of the larger municipal and Federal systems.

The results of the survey, released by Ernest R. Acker, president of EEI, show that the electric light and power industry met December's peak demand for elec-

THE MARCH OF EVENTS

tricity, the highest electric load in history, with a generating capacity margin of 5.1 per cent to spare.

This reserve margin of 5.1 per cent for December, 1948, was slightly greater than the 5 per cent reserve of the previous year and substantially above the 4 per cent margin indicated by the institute's survey last September. It was more than three times greater than the 1.6 per cent "safety margin" predicted in a report of the National Security Resources Board, released on December 13th.

A major factor in providing this reserve margin was the installation of over 4,000,000 kilowatts of new generating capacity during 1948, a record for a single year.

Court Refuses FPC Bids

THE U. S. Circuit Court last month turned down the Federal Power Commission's application for an injunction to restrain Panhandle Eastern Pipe Line Company from paying a dividend of 810,000 capital shares of Hugoton Production Company to its stockholders.

The court, however, continued for another ten days a temporary order issued last December restraining Panhandle from making the distribution and also restraining Hugoton from assigning any of the leases on 96,164 acres of land in Kansas it has received from Panhandle as part payment for the stock proposed for distribution.

Reason for continuing the temporary order was to give the commission an opportunity to ask the U. S. Supreme Court to review the case, the circuit court said.

The decision upheld Judge Paul C. Leahy at Wilmington, who originally refused an injunction to the FPC.

The FPC subsequently announced, upon joint request of Panhandle Eastern Pipe Line Company and the FPC staff counsel, that it has postponed until February 7th the hearing previously scheduled to commence January 24th in Washington, D. C., in the investigation initiated by the commission involving Panhandle's transfer of natural gas reserves to Hugoton Production Company.

Alabama

State-owned "Little TVA" Advocated

GOVERNOR James E. Folsom, who has long advocated expansion of the Tennessee Valley Authority, set out last month to develop a state-owned "Little TVA" in Alabama.

Appearing before the legislative council which is drafting a program for the 1949 session, Folsom disclosed plans to ask for a constitutional amendment to set up an agency to generate and distribute low-cost electric power in the state.

He did not go into detail, but said the "Little TVA" could be located on the Coosa and Tallapoosa rivers and could be financed with a loan from the Reconstruction Finance Corporation. No estimate was made of the cost.

The governor said one reason for his plan was made that Alabama may run into a shortage of electricity in the future and a publicly owned system would provide a new source of power. It would take a constitutional amendment because Alabama's organic law prohibits works of internal improvement.

Connecticut

Power Strike Averted

ATHREATENED strike at the plant of the Bridgeport Gas Light Com-

pany was called off recently just two hours before the deadline set for the walkout.

PUBLIC UTILITIES FORTNIGHTLY

Danger of a shutdown which would have cut off power and light from many industries and public institutions ended when members of Local 12,298, District 50, United Mine Workers, voted to accept a last-minute offer by the company.

Walter M. Brock, international repre-

sentative of the UMW, said after the meeting that the company proposal included a general wage increase of six cents per hour, with additional increases of three cents an hour for shift workers and three and one-half cents an hour for appliance and servicemen.

Illinois

Tax Measures Introduced

ILLINOIS municipalities are attempting to get a slice of utility tax revenue. Measures to permit municipalities to obtain revenue from the state's 3 per cent tax on utility sales within city limits were introduced last month in the state legislature. Similar bills were rejected during the 1947 legislative session, but the new

legislation was reported to have the endorsement of numerous civic and political groups.

Representative G. William Horsely, Springfield Republican, is author of the new bills, which are designed to relieve financial strain in cities. Cosponsors are Representatives William G. Thon of Oak Park and J. Lisle of Hampshire, both Republicans.

Maryland

Rate Boosts Sought

AN emergency increase of approximately 11½ per cent in its base rates for electricity, gas, and steam, to become effective on April 1, 1949, was asked by the Consolidated Gas, Electric Light & Power Company on January 11th in a petition filed with the state public service commission.

Based on anticipated volume of business for this year, the emergency rates are calculated to produce additional gross revenues of approximately \$7,100,000 a year. That sum for a full twelve months' operating period is estimated by the utility to provide an additional annual net operating income of about \$4,290,000, after taxes.

For a typical residential customer using 100 kilowatt hours of electricity per month, it would mean a boost of approximately 1½ cents per day. The gas bill of a typical residential customer, using 3,000 cubic feet of gas per month, would be boosted approximately 1½ cents per day also.

The company's rate experts figure that 65 per cent of its 262,000 residential gas customers consume an average of 3,000 cubic feet of gas monthly, while a like percentage of the 317,000 residential users of electricity consume an average of 100 kilowatt hours per month.

The utility proposes to make no change in the fuel adjustment rates established when the last change was made in base rates on April 1, 1947.

Massachusetts

New Utility Commission Proposed

CREATION of a new state commission to intervene in behalf of the public

in utility rate cases was proposed by Governor Paul A. Dever in his inaugural address last month to the state legislature.

Broad functions of the proposed

THE MARCH OF EVENTS

agency also would include investigation of the possibilities of hydroelectric development and the importation of natural gas into the state.

Governor Dever said "we have witnessed an ever growing and increasingly crushing burden on the wage earner due to the rising cost of the necessities of life." He said gas, electricity, telephone, and transportation exact more and more dollars from the already overburdened weekly pay check.

He recommended immediate legislation to discard the present commission and to "establish a new, vigorous, and alert commission."

The "revitalized commission" would include: (1) a consumers' counsel and staff of specialists who will appear for the public and protect its interest before boards and commissions hearing petitions for rate and price increases; (2) a fact-finding subdivision composed of experts in the fields of investigation, research, ac-

counting, economics, and statistics, with adequate assistants to make reports and recommendations relating to prospective shortages and costs of services and commodities; (3) a special subdivision which will thoroughly survey the following possibilities: "developing our rivers for the production of cheap and abundant electricity to serve residential, industrial, and agricultural purposes; procuring the coöperation of sister states in such projects; enlisting the aid of the Federal government, so that we may be assured of our rightful share of all national appropriations for low-cost electricity, improved navigation, pollution elimination, flood control, and enhanced recreational opportunities; and bringing into this commonwealth by means of pipe line a sufficient amount of natural gas to effect reductions in the price of gas."

Governor Dever also discussed the problems of the Metropolitan Transit Authority.

Michigan

Rate Increase Authorized

A 16.73 PER CENT increase in rates of Detroit Edison Company was authorized last month by the state public service commission. The increase equals 63 cents a month on the average residential consumer bill and will increase the company's revenue \$13,080,000 a year. Raymond J. Kelly, Detroit corporation counsel, said the city would appeal the order to the state supreme court. The commission rate order also authorized a reduction in the prompt

payment discount from 10 to 3 per cent.

The company based its appeal for the rate increase on a \$10,000,000 building program and said the increase was the first in twenty-seven years, although it has cut rates 52 times in that period.

Hearing on Consumers Power Company's application for a \$6,600,000 increase in electric rates will be held February 15th to 17th, the state commission announced recently. The increase requested would average about 16 per cent.

New Mexico

Urges Natural Gas Control

STRENGTHENING of the state public service commission and provision for some system of control over natural gas production were urged by Governor Thomas J. Mabry in addressing the

opening sessions of the state legislature last month.

As to the public service commission, he said: "If the arm of this important agency needs strengthening in any way, I suggest it be strengthened and given such powers as will add the necessary

PUBLIC UTILITIES FORTNIGHTLY

authority to its directives and control." (State Corporation Commissioner Ingram Pickett had earlier said he would seek abolition of the commission.)

On the subject of natural gas control, Governor Mabry said "we must be as-

sured that the needs of our own state will be safeguarded and secured as far as possible in the production and distribution of this important natural product."

The governor also urged "a close examination of severance taxes."

New York

Rate Petition Denied

THE state public service commission recently announced that it had denied a petition of the Consolidated Edison Company of New York for a rehearing on the commission's order for a reduction of \$21,500,000 in annual electric rates, starting January 10th, pending determination of final rates. The reduction represents a cut of 10 per cent in the bills of all customers except public authorities.

Milo R. Maltbie, chairman of the commission, said in an opinion that the standard which was used in ordering the reduction in electric rates formed the basis for granting the corporation an increase in gas rates aggregating more than \$11,000,000 annually.

The corporation said in the petition which was denied that if the order concerning electric rates were rescinded and the old rates reinstated, the company would agree to refund, in case of a final adverse ruling, the amounts paid by customers in excess of the final rate. Commissioner Maltbie said the petition amounted to "thrashing over old straw."

State Development of St. Lawrence Urged

IN his message to the state legislature last month, Governor Thomas E. Dewey urged that state development of St. Lawrence hydroelectric power be undertaken as soon as possible and that restrictions against state construction of transmission lines be removed.

"The plans for the construction of the St. Lawrence power project, approved by the United States Army Corps of Engi-

neers, have been in existence since 1941," Dewey said, "yet the unbridled power of this great river still flows wastefully to the sea."

He said the state of New York is suffering from a power shortage which requires it to obtain from the Province of Ontario over 2 billion kilowatt hours a year to maintain existing production. Meanwhile, Ontario is reported to be in dire need of this power. Governor Dewey stated:

To each new session of Congress there has been presented a bill to make possible the development of the St. Lawrence. Conflicting interests have repeatedly made the passage of such a bill impossible. I have always favored the full development of the St. Lawrence seaway and will continue to support any program which respects the agreed rights of our state.

But, meanwhile, the power can be developed without reference to the seaway and, let me emphasize, without impeding it when and if it is approved by the Congress. Accordingly, last year, New York state attempted to go ahead under the terms of the existing Boundary Waters Treaty between the United States and Canada. The power authority of this state has applied to the Federal Power Commission for approval, and to the United States Department of State to transmit its application to the International Joint Commission.

Again the needs of the people of this state have been disregarded. The State Department has refused even to transmit the application of the state of New York.

The governor said the following steps could be taken to assist in clearing the way for action when and if Federal co-operation can be procured: (1) The law under which the New York State Power Authority acts should be improved by relaxing the requirement that the power authority must have firm contracts for the sale of its power before issuing any

THE MARCH OF EVENTS

bonds; (2) the authority should be empowered to construct transmission lines where necessary to bring this great supply of power to the load centers.

He said power in human terms means many things. "It means new business, new employment, and greater prosperity. It means the extension of the modern conveniences of life to rural areas. It means a greater number of labor-saving appliances in every home. These benefits are being denied the people of the state of New York without valid reason."

Administration leaders subsequently

stated that the St. Lawrence development was not intended to be "a pilot plant" designed to show up the private utilities. They added that there was a tendency to have an average cost of power, and that it was cheaper to transmit power than it formerly was. On that theory, they repeated, any reduction in rates made possible in some areas by state development of the St. Lawrence eventually would be reflected in lower rates elsewhere. Another factor stressed was that the public service commission would retain its rate-regulating authority.

North Carolina

Reorganization Recommended

REOrganization of the state public utilities commission "so that it can act promptly and effectively in the public interest" was recommended to the state legislature by Governor William Kerr Scott in his inaugural address on January 6th. He stated:

A large number of our people are being penalized by not having electric power and telephone service. Our industry has been retarded by inequitable power and transportation rates.

Electric power is the cheapest labor the farmer, as well as the manufacturer, can hire. Yet there are still around 1,000 farms in North Carolina that do not have electricity, and there are sections in which industry is being throttled because it cannot get electric power on terms that will enable it to compete with similar industries elsewhere. I want to see these service deficits wiped out during my administration.

The telephone ranks at the top of modern conveniences. Yet the surface has barely been scratched in making the instrument available to all the people. This service deficit is not only retarding rural development but constricting our whole economic and social progress by encouraging movement of our people into already congested areas. . . .

Our utilities are privately owned and they should be permitted a reasonable return upon their investment, but to justify their monopolistic franchises granted them by the people of the state, they must also provide the service to which the people are entitled.

In the field of regulating public utilities we must have fair and aggressive administration of fair laws designed to protect the public interest as well as the interests of investors in public utilities. Our laws regulating utilities are, in some respects, cumbersome, out of date, and inadequate to meet modern conditions. Our state utilities commission needs to be reorganized and supplied with the services of experts so that it can act promptly and effectively in the public interest.

Ohio

Gas Restriction Upheld

Ohio's public utilities commission has power to issue emergency orders authorizing natural gas companies to restrict the use of gas in times of seasonal shortage.

The state supreme court's decision on January 12th sustained an Akron court refusal to enjoin the East Ohio Gas Com-

pany from shutting off service to an Akron customer who had installed a gas furnace in his home after being denied authority to do so by the company. The state commission had sanctioned the action.

The state supreme court dismissed the appeal and also refused to review the case for possible error.

Rhode Island

Would Simplify Rate Procedure

SIMPLIFICATION of Rhode Island's public utility rate regulatory procedure was urged by Governor John O. Pastore in his inaugural message last month to the state legislature.

He advocated a system under which only one hearing would be held in rate cases, with provision for direct appeal to the courts rather than to a 3-man appeal board. Pastore said:

It has long been an accepted fact that the regulation of public utilities is an important state function. The service provided by our public utilities affects every citizen and is essential to the welfare and continued prosperity of our people. Such regulation should be, of course, always just and reasonable.

A public utility, like any other business, is entitled to a fair return on its investment. We must never lose sight of the fact, however, that the public interest should also be properly protected. The telephone rate case now in progress emphatically demonstrates that our public utility law works to the advantage of the public utilities and against the public interest.

He stated that the public utilities deserve fair, impartial hearing, but after a case has been heard by one administrative body, "recourse on appeal should be to the courts and not to another administrative body."

The governor strongly recommended that the whole procedure be simplified, allowing the utility company a fair hearing before an administrative body.

South Dakota

Legislation Recommended

IN his second inaugural address early last month to the state legislature, Governor George T. Mickelson recommended that light, power, and gas distribution be placed under the supervision and regulation of the state public utilities commission "along with the common carriers, telephone and telegraph companies now being so supervised."

Governor Mickelson also mentioned but took no stand on public power districts, asserting that "there are many questions

as to the feasibility and methods of creating such districts still unanswered in my mind." He said he wanted more information before coming to a decision.

Predicting that a power district bill would "without a doubt" be introduced in the legislative session, he urged the lawmakers to obtain all possible data on power districts and weigh the subject carefully before acting. He predicted that the power district bill would be one to supplement present laws governing generation and distribution of power by municipalities.

Vermont

Seeks State Power Authority

GOVERNOR Ernest W. Gibson last month asked the Vermont legislature for a state power authority with permission to buy, sell, and generate electricity. Consumers in Vermont, he said, pay more for electric power than do consumers in 44 other states.

Governor Gibson asked that the state

public service commission be given power to compel electric distributors to co-ordinate their transfer systems. He said some sections of the state exported power, while other sections, experiencing shortages, had to import it. He said development of the St. Lawrence river might be a future source of cheap power, but asked that meanwhile a state power authority be created.



Progress of Regulation

Present Expense Allowance Not to Be Governed By Comparison with Previous Years

AN order of the Tennessee commission denying a telephone rate increase, in 72 PUR NS 264, was held by the state court of appeals to be confiscatory because it required the company to operate its business at a loss.

The court said:

There is no substantial evidence to support the conclusions of the commission in disallowing the increase in rates. A reading of its opinion indicates that the deductions made by it in allowances for expenditures are based upon a calculation and comparison of the present operating expenses and those of previous years, which method is not justified by the record.

Much had been said in the argument about the foreseeable future, but the court said it could not engage in prescience and would not attempt to foretell what the future had in store as to cost of materials and supplies or as to wages and salaries. It should be left to the commission and the courts at some future date to adjust rates according to conditions.

The court found no evidence to justify a conclusion that maintenance expenses would be less in the few years succeeding 1946 than they were in that year.

Amounts actually paid for traffic expense were said to be properly allowable, and it was not reasonable to compare this expenditure with traffic expenses in 1939.

In disapproving the commission's reduction of commercial expenses, the court said there was no evidence to support the reduction and there was no charge of extravagance, mismanagement, or abuse of

discretion on the part of the officers of the company. The commission could not substitute its judgment for that of these officials. Their good faith was presumed in the absence of any evidence to the contrary.

Likewise, the court saw no reason for disallowing an amount actually paid to the trustee of a pension trust fund dedicated to the payment of pensions and which was an operating expense under the uniform system of accounts. The commission had ascertained the percentage of pension expense to the total payroll and applied this percentage to the payroll as reduced by it, and it had also disallowed an amount representing pension accruals.

The court approved a lower court ruling in 74 PUR NS 150, that the company got full value from the American Telephone and Telegraph Company under its license contract and that a payment of 1½ per cent of gross revenues for services was reasonable. It agreed with a lower court conclusion that the telephone company purchased from Western Electric Company essential materials at a price less than it could get them from any other source, and that the profit made by the American Company from its ownership of stock in Western Electric was moderate.

Disallowance of part of the claim for depreciation was criticized. The court said that, while the commission might require the company to adopt a system of accounting, such system must conform

PUBLIC UTILITIES FORTNIGHTLY

to that adopted or approved by the Interstate Commerce Commission where applicable. Federal regulations required depreciation to be figured on the straight-line basis as was done by the company,

and the commission would have no right to prescribe a different method, as it had done in an earlier order. *Southern Bell Teleph. & Teleg. Co. v. Railroad and Public Utilities Commission et al.*



Securities Commission Properly Approved Financing of Pipe Line Allowed by Power Commission

OBJECTIONS by Panhandle Eastern Pipe Line Company to orders of the Securities and Exchange Commission approving the financing of a natural gas pipe line were overruled by the United States Court of Appeals, Eighth Circuit. Panhandle is not only in the position of a competitor but also owns stock in companies in the holding company system interested in the new line.

Modifications made in the manner of construction, the court held, did not invalidate the certificate issued by the Federal Power Commission authorizing the line. The feasibility of the project was held to be primarily a question for the Federal Power Commission and not for the Securities and Exchange Commission.

Approval by the Federal Power Commission of the feasibility of the project, it was held, could not be limited to initial

operations where the entire project was before the commission and further authorizations were to be sought as the need should arise.

The conclusion of the Securities and Exchange Commission that certain companies could be retained by a company as an integrated public utility system was held to be supported by the evidence. A finding that consumers would benefit from integration of public utilities and coordination therewith of certain non-utility businesses and other findings were held to meet the requirements of the Holding Company Act that such businesses should be necessary or appropriate in the public interest or for protection of investors or consumers and not detrimental to proper functioning of an integrated public utility system. *Panhandle Eastern Pipe Line Co. v. Securities and Exchange Commission*, 170 F2d 453.



Stock Offering to Employees below Market Price Approved

THE Securities and Exchange Commission exempted the issuance and sale of securities by a subsidiary of a holding company under the Holding Company Act where it found they were solely for the purpose of financing the subsidiary's business and had been expressly authorized by the state commission of the state in which the subsidiary was organized and operating. The company proposed to issue bonds at competitive bidding and also to sell additional shares of common stock which would be offered to its common stockholders of record.

Subject to the subscription offered to stockholders, employees of the company

were given the right to subscribe for a maximum of 12,000 shares at \$13.50 per share. No employee could subscribe for more than 400 shares. The commission said with respect to this:

Such an offer to employees presents relatively novel questions under the provisions of the act, resulting from the fact that to the extent that the offering price to the employees is below the market price of the stock, the discount, in effect, represents an enrichment of employees who exercise the rights and a concomitant dilution of the equity of the existing common stockholders. In considering whether such an offering to employees is reasonable from the standpoint of the company and its security holders, we, of course, take cognizance of the company's contention that such an offering may have a

PROGRESS OF REGULATION

beneficial effect on relations with employees. In view of the fact that the amount of the apparent discount involved in the offering is relatively small, and that the offering is made on a per capita basis with limitations on the maximum number of shares which can be purchased under the offering, we are not inclined, under the circumstances of this case, to interfere with the offering. However,

we desire to make it clear that such offerings to employees present problems under the act, which will be subject to close scrutiny.

Re Wisconsin Power & Light Co. et al. (File Nos. 70-1925, 70-1926, Release No. 8499).



Legality of Transmission Rule Is for FCC to Decide

THE United States District Court for the Eastern District of Pennsylvania dismissed a television corporation's request for a preliminary order restraining the American Telephone and Telegraph Company from refusing to accept programs from the National Broadcasting Company for transmission to the television corporation's station.

The television corporation operates a station in the Philadelphia area. It maintains its own private relay between this station and the NBC studios in New York.

NBC has a contract arrangement with AT&T for the use of its long lines for television transmission. AT&T refused to transmit programs for NBC which had been received over the private relay on the ground that a company regulation prohibited such action.

The court denied, on jurisdictional grounds, the television company's request

for an order compelling acceptance of the programs. It pointed out that if the regulation were clearly illegal, it most certainly would be able to grant relief.

However, in this case the illegality of the regulation was dependent on the reasonableness of the encroachment on the television company's business which the regulation brought about. This was considered a matter which the Federal Communications Commission and not the court should decide.

The company's assertion that the fact that such a program travels over a private communications system can have no effect upon the carrier service asked of the telephone company or the cost of rendering such service, was also reserved for the commission's consideration in a separate proceeding in which the television company had intervened. *Philco Corp. et al. v. American Teleph. & Telegr. Co. 80 F Supp 397.*



Creditors Receive Only Part of Pledged Stock in Holding Company Reorganization

THE United States Court of Appeals affirmed an order of the district court approving and enforcing a holding company reorganization plan. The court decided that the Securities and Exchange Commission's findings of fact furnished adequate support for the conclusion reached by both the commission and district court that the plan was necessary and appropriate to carry out the mandate of the Holding Company Act. Under these circumstances, the court held, it could not substitute its judgment for that of the commission and district court.

The principal objection was that the Holding Company Act does not authorize the approval or enforcement of a plan which compels secured creditors to accept, in satisfaction of their claims, a portion only of the property which has been pledged for their benefit. It was contended that the plan deprived the debenture holders of their right to have all of the pledged stock of a surviving subsidiary applied to the satisfaction of their claims. The court held this contention to be without merit.

The court observed that it is now

PUBLIC UTILITIES FORTNIGHTLY

settled that security holders having priorities and preferential rights in a public utility holding company may, in a reorganization called for by the act, be compelled to accept the equitable equivalent of their claims in other securities in the continuing enterprise. It said that this principle has been applied not only to preferred stockholders but also to creditors.

Accordingly, it held, security holders who have invested in the enterprise whose capital structure violates the act may properly be required to accept the equitable equivalent of their investment in the form of new securities in the sim-

plified structure of the continuing enterprise instead of the payment to which they would have been entitled if the enterprise had been liquidated.

The purpose of the pledge of property is merely to assure the payment of the creditors' claims, it was said. If a claim is lawfully satisfied by the delivery to the creditor of its equitable equivalent in other securities, the function of the pledge has been fulfilled, according to the court. A creditor has no right to pledged property as such, but has recourse to it only if necessary to secure the satisfaction of his claim. *Re Community Gas & Power Co.* 168 F2d 740.



Certificate to Operate "over City Streets" Not Invalid For Indefiniteness

THE United States District Court for New Jersey dismissed an action by a motor carrier against a competitor and the Interstate Commerce Commission. The carrier objected to a commission order which, he alleged, "by inadvertence" removed a seasonal limitation from the competitor's certificate.

The court pointed out that the wording of the commission decision indicated that there was no inadvertence, and further that an enlargement of the carrier's authority beyond that which it requested was within the discretion of the commission.

To the carrier's contention that the wording of the competitor's certificate

permitting service "over city streets" was vague and made the certificate invalid for indefiniteness, the court answered:

At the time the Hudson order was issued, there was no apparent reason why the city streets should be specified therein. The omission from the certificate issued to Hudson, pursuant to that order of the designation of the streets over which it was authorized to operate, does not establish that the certificate was inadvertently issued. . . .

It is interesting to note that the certificate, under which plaintiff, Boulevard, now operates, is subject to the same criticism it directs toward the defendant Hudson's certificate.

Boulevard Transit Lines, Inc. v. United States et al. 77 F Supp 594.



Fare Increase Wrongly Withheld to Force Lower Student Fares

AN order of the Maryland commission requiring a passenger bus and electric railway company to establish 3-cent ticket fares for schoolchildren and not to put into effect a previously approved rate increase unless these reduced rates were adopted was held by the Maryland Court of Appeals to be illegal. The court said that the company could not be

coerced to make an unreasonable decrease in fares by unlawful denial of necessary fare increases.

The commission's opinion demonstrated that existing fares were inadequate and that new fares were not more than reasonable. Yet, said the court, the order purported to find that existing fares were reasonable "until" fares for

PROGRESS OF REGULATION

schoolchildren are decreased and the company's losses thus increased.

The state, said the court, has a broad field for the exercise of discretion in prescribing reasonable rates. It is not necessary that there should be uniform

rates or the same percentage of profit on any sort of business. Nevertheless, the state may not select a class of traffic and compel a carrier to transport it at less than cost. *Capital Transit Co. v. Bosley et al.* 62 A2d 267.



Hand-set Differential Retained

THE Missouri commission allowed a telephone rate increase where present rates did not provide sufficient revenue to meet operating expenses.

Elimination of a differential between handsets and wall or desk telephone instruments was barred by the commission with this observation:

We are convinced from our study of the

rate structures of all telephone companies that this differential should be continued, especially until the company is prepared and able to install a new hand-set receiver at all of its present stations having the antiquated wall or desk instruments. The elimination of this differential at this time removes any incentive to the company to make this conversion.

Re Western Light & Teleph. Co. (Case No. 11,174).



State Power Restricted by Federal Action

THE appellate department for the superior court, Los Angeles county, California, reversed a conviction of several motor carrier operators for the unauthorized selling of transportation of persons over public highways.

The court ruled that Congress, by enactment of a provision of the Interstate

Commerce Act penalizing the unauthorized selling of transportation of persons by motor carrier in interstate commerce, had usurped the field to the extent that prosecution for violation of the state statute by selling transportation to persons in interstate commerce was precluded. *People v. Zook et al.* 197 P2d 851.



Earnings of Holding Company Having Foreign Subsidiaries Estimated on Corporate Basis

THE United States District Court, in upholding an amended plan of reorganization of a holding company as approved by the commission, decided that the commission's method of valuing the company's earnings and securities was sound and reasonable. The commission had given greater weight to corporate figures than to consolidated earnings.

The court observed that although it has been the commission's practice to stress consolidated earnings of holding company systems in most simplification cases, the fact that all operating subsidiaries in this case were located in foreign countries made its usual practice

inadvisable. Here the process of transferring earnings of subsidiaries was subject to such contingencies as fluctuations in foreign exchange, currency restrictions, conversion obstacles, and the dangers of expropriation.

The plan provided principally for the retirement of outstanding 5 per cent debentures of the holding company, the issuance of new debentures and common stock to be distributed in specified ratios to holders of the other outstanding securities of the company. The holding company's parent company would receive new debentures and common stock in return for all of its holdings of securi-

PUBLIC UTILITIES FORTNIGHTLY

ties of the holding company being reorganized. The allocations involved a "give-up" of about \$4,500,000 in the parent company's participation, in settlement of various claims against it asserted by the subsidiary holding company and certain security holders.

The court believed the principal issue in this proceeding to be whether the commission erred in its allocation of new securities between the parent holding company and the public holders of second preferred stock. It observed that the commission's determination necessarily assumed the rejection of the full application of the so-called "Deep Rock" doctrine. This had been invoked in a previous case in which a parent creditor was subordinated to all public security holders because of its past irresponsible financial manipulations of its subsidiary. The court held that the full subordination of the parent company's claim was unwarranted. The amount and allocation of its "give-up" were deemed equi-

table. There was evidence of several kinds of management errors and some instances of overreaching spread over a period of over twenty years. During this period, however, the parent company contributed to its subsidiary holding company much skillful and aggressive management. It was noted that this would be an enterprise which today would be prospering were it not for the peculiarly drastic effect upon it, as a foreign project, of the world depression. The court did not believe this to be a situation thoroughly honeycombed by the dubious activities, spoilation, or faithless stewardship of a parent corporation bent on pursuing its main end of using its subsidiary as the means of transferring moneys from the public to itself.

The argument that the jurisdiction of the commission was lacking because the operating properties of the holding company were located outside the United States was rejected. *Re American & Foreign Power Co. et al.* 80 F Supp 514.



Intention of Shipper Not Controlling

THE conviction of a motor carrier of operating without a certificate was reversed and a new trial ordered by the Pennsylvania Superior Court. The operator's defense was that he came within an exception in the law exempting from the certificate requirement independent contractors hauling agricultural products for the owners of farms.

Shipments involved consisted of young steers purchased by a farm operator for fattening. The lower court in its charge to the jury apparently made the guilt of the carrier depend on whether or not the farm operator intended to resell the steers.

The court ruled that such an interpretation of the statute was wrong and, in ordering a new trial, commented:

The fundamental error in the charge was in making defendant's guilt or innocence depend upon the believed intention of the shipper. The statute cannot be interpreted so as to make defendant's guilt dependent upon the state of mind of the shipper or his intention as to future use of the product transported. Defendant's guilt or innocence must be determined as of the time of the transportation. The sole issue on this phase of the case may be stated thus: Was defendant's hauling of the cattle as agricultural products for a farmer or for a cattle dealer?

Pennsylvania v. Bitzer (No. 128).



Private Water Extension Not a Utility

THE Pennsylvania commission dismissed the complaint of several property owners against the refusal of the owners of a water pipe line to serve them. Lack of jurisdiction was the basis

for the Pennsylvania commission action.

The line varied from 2 to 3 inches in diameter, ran for about 4,000 feet, and connected some twenty-eight residences to the lines of a public utility. The cost

PROGRESS OF REGULATION

of its construction was entirely borne by its installers.

The commission said that the water line and the service provided by it were private property rights and not public facilities defined by the Public Utility Law.

This ruling barred the commission from regulating its service to new applicants and required a dismissal of the complaint. *Morouse v. South Pittsburgh Water Co. et al.* (Complaint Docket No. 14297).



Board May Not Establish Retroactive Mail Rates

THE United States Court of Appeals for the District of Columbia affirmed an order of the Civil Aeronautics Board denying an air carrier's request that the board establish retroactively a domestic air mail rate. The carrier claimed that the rate which the board had established by an earlier order was arbitrary and confiscatory.

The court pointed out that the statute conferring on the Civil Aeronautics Board power to fix rates for transportation of air mail does not confer power to increase mail rates retroactively to cover a period in which a final rate order previously entered was in effect. *Transcontinental & Western Air, Inc. v. Civil Aeronautics Board*, 169 F2d 893.



Other Important Rulings

THE opportunity of obtaining information as to the utility and effectiveness of helicopters for the transportation of mail, persons, and property in and around the Chicago area, which information would be important to national defense as well as commercial air operations, was a primary consideration of the Civil Aeronautics Board in authorizing the service. *Re Helicopter Air Service* (Docket No. 2384 et al.).

The Virginia commission, after considering all the evidence brought before it upon the complaint of a gypsum company against tariffs of a railroad applicable to intrastate shipments, ruled that the tariffs should be placed on the same basis as the rates found proper and made applicable on interstate commerce in the same territory by the Interstate Commerce Commission. *Virginia ex rel. United States Gypsum Co. v. Atlantic Coast Line R. Co. et al.* (Case No. 8221).

The United States District Court for Montana affirmed an Interstate Commerce Commission order requiring a railroad to cease and desist rendering switching services within a copper company's

plant on the ground that such operations were not a part of the transportation service within the railroad's filed rates and that additional charges should be made therefor. The court ruled that such an order was within the statutory jurisdiction of the Interstate Commerce Commission, was supported by substantial evidence, and was neither arbitrary nor capricious. *Anaconda Copper Mining Co. v. United States*, 77 F Supp 611.

The Maine commission, in computing the cost of a water district's plant for rate-making purposes, held that government grants should not be deducted. It believed that they are in a different category from customer contributions which should be deducted. *Public Utilities Commission v. Portland Water District* (FC No. 1277).

The New York commission, in a proceeding brought by a motor carrier to consolidate authority held by it under many different certificates into one clear and unambiguous certificate, refused to grant any additional authority where no new facts were submitted at the hearing to warrant modification or enlargement

PUBLIC UTILITIES FORTNIGHTLY

of the authority previously conferred. *Re Garrison (Case 4329, 7419, 7858, 911, 3059, 5908, 7159, 8226).*

The Civil Aeronautics Board authorized an intermediate stop at Sitka for several Alaskan air carriers when evidence presented by the carriers indicated that the volume of traffic between this city and other cities on the routes was considerable, that the time saving which direct air service would effect would be substantial, and that direct service could be afforded with slight additional cost. *Re Alaska Coastal Airlines (Docket No. 2289).*

An extension to an air carrier's certificate to permit its operation for an additional period was authorized by the Civil Aeronautics Board where the record indicated a continued improvement in its operating results and the likelihood of further improvement in the future, and where an additional period of operation was necessary in order to provide data

for an adequate appraisal of the potentialities of the service provided. *Re Challenger Airlines Co. (Docket No. 3369).*

The Louisiana commission, in overruling objections of a railroad association and awarding a certificate to a motor carrier for the transportation of boats, commented that motor carrier service was superior to rail service in that it permitted delivery directly to the point of launching. *Re Security Storage & Van Co. (No. 4803, Order No. 4999).*

The Wisconsin commission, in permitting a power company to modify its coal adjustment clause so that additional revenue would be provided from sales to large volume consumers, pointed out that the change would serve to maintain a relatively stable competitive relationship between the utility rates and the alternative cost of self-generation by the customer. *Re Wisconsin Michigan Power Co. (2-U-2803).*

Titles and Index

Preprints in This Issue of Cases to Appear in
PUBLIC UTILITIES REPORTS

TITLES

Capital Airlines v. Civil Aeronautics Board	(USCtApp[DC]) 95
Goldsboro Gas Co., Re	(NC) 93
Harper, Re	(Idaho) 87
Pittsburgh & W. V. Gas Co., Pittsburgh v.	(FPC) 65
Westchester Street Transp. Co., Re	(NY) 89

INDEX

Depreciation—gas well equipment, 65; natural gas depletion, 65. Discrimination—service at less than cost, 93. Expense—amortization of wildcat acre- age, 65; field price of natural gas, 65; gas production, 65. Intercompany relations—loans between affiliates, 89.	Rates—intercompany relations as factor, 89; retroactive revision of air-mail rates, 95. Return—capital invested as basis, 87; electric company, 87; investment basis, 65; natural gas company, 65. Valuation—market value factor, 65; re- production cost, 65.
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FEDERAL POWER COMMISSION

City of Pittsburgh
v.
Pittsburgh & West Virginia Gas
Company et al.

Docket No. G-627

Re Pittsburgh & West Virginia Gas
Company et al.

Docket No. G-635

Opinion No. 168

September 2, 1948 (issued October 8, 1948)

COMPLAINT by city against natural gas rates, consolidated with investigation ordered by Commission; rate reduction ordered. Rehearing granted November 26, 1948, limited to presentation of evidence as to experience in 1948, and rehearing otherwise denied. Pending rehearing, order to go into effect in limited form and additional revenues to be earmarked and subject to refund.

Valuation, § 27 — Measures of value — Market value — Reproduction cost.

1. Evidence of market value of natural gas acreage, trended original cost, and reproduction cost of operating properties, together with evidence with respect to changes in construction and commodity costs and in the purchasing power of the dollar, not taken from books and records and not purporting to represent actual cost of investment, is too conjectural and illusory to be given any weight in natural gas rate proceedings, p. 69.

Valuation, § 409 — Evidence — Present cost.

2. Reproduction cost evidence and other evidence to show present cost, as distinguished from actual cost of investment, is properly excluded in a proceeding to fix gas rates, p. 69.

Expenses, § 135 — Natural gas production — Commodity value of gas.

3. The commodity value or field price of natural gas produced by a natural gas company from its own gas acreage should not be included as an operating expense in lieu of actual production cost, p. 69.

FEDERAL POWER COMMISSION

Return, § 11 — Basis — Limitation to investment.

4. The utility investor should receive a fair return on his investment devoted to the public service, and the consumer should not be compelled to pay a return upon an increment of value above such investment, p. 69.

Rates, § 648 — Evidence — Field price of natural gas.

5. Exclusion from evidence, in a natural gas rate proceeding, of testimony relating to the field price of natural gas, proposed as a substitute for production cost, is proper, p. 69.

Depreciation, § 66 — Natural gas field lines.

6. A depreciation rate of 3.33 per cent for natural gas field lines was approved, p. 73.

Depreciation, § 67 — Gas well equipment — Depletion.

7. The depreciation reserve for natural gas well equipment should be determined on a depreciation basis instead of the equipment being depleted, p. 74.

Depreciation, § 67 — Natural gas depletion— Reserves from deeper drilling.

8. Inclusion of the probable reserves to be recovered from deeper drilling of natural gas wells in estimates of a natural gas company's probable ultimate recoverable reserves, for the purpose of determining the proper depletion rate and proper depletion reserve requirements, is fair, reasonable, and proper, p. 75.

Depreciation, § 67 — Natural gas company — Depletion.

9. Depletion allowances so calculated and determined as to reimburse a natural gas company for its entire investment in the related properties over the service life thereof were approved, p. 76.

Expenses, § 135 — Natural gas company — Amortization of wildcat acreage.

10. Expense relating to wildcat acreage of a natural gas company is properly allowed by amortization of wildcat acreage and allowance of the cost of leases actually abandoned during each year as an operating revenue deduction, p. 78.

Return, § 101 — Natural gas company.

11. A return allowance of 6 per cent on the rate base of a natural gas company was held to be the maximum reasonable rate which could be allowed, p. 79.

Expenses, § 9 — Test period — Subsequent cost increases.

12. Allowance should be made as cost of service for all legitimate expenditures for gas, labor, taxes, and other items of expense incurred during a test period, or which it is shown would have been incurred had subsequently established costs been in effect during the test period, provided that the evidence does not show such an excess of future revenues over future costs of service as would offset or absorb such known and experienced increases in costs, p. 80.

Expenses, § 114 — Income tax — Adjustment for test period.

13. Operating revenue deductions based on a test period should be reduced by an amount equal to the aggregate of accruals for Federal and state income taxes and for Federal capital stock taxes (no longer effective) paid and accrued in the test year when, on the assumption that income would not be permitted to exceed cost of service, no such income tax payments would be required, p. 82.

PITTSBURGH v. PITTSBURGH & WEST VIRGINIA GAS CO.

Expenses, \$ 135 — Natural gas company — Field price theory.

Description by the Federal Power Commission of the field price theory of establishing a natural gas price to be allowed as an operating expense in lieu of actual production costs, p. 69.

(WIMBERLY and SMITH, Commissioners, dissent, October 5, 1948.)

(OLDS, Commissioner, concurs in separate opinion, October 8, 1948.)

APPEARANCES: Miss Anne X. Alpern, City Solicitor, Pittsburgh, Pa., and Joseph A. Langfitt, Jr.,¹ Assistant City Solicitor, Pittsburgh, Pa., for complainant; Nathaniel K. Beck, County Solicitor, Pittsburgh, Pa., and Frank Butler, Assistant County Solicitor, Pittsburgh, Pa., for intervenor, Allegheny county, Pa.; Harry D. Booth, Washington, D. C., Herbert Sharfman, Washington, D. C., and Julius Rudolph, Washington, D. C., for the Administrator of the Office of Price Administration and the Director of Economic Stabilization; Charles M. Love, Charleston, W. Va., and W. A. Thornhill, Jr., Beckley, W. Va., for Public Service Commission of West Virginia; Charles E. McGee,² Washington, D. C., and Reuben Goldberg, Washington, D. C., for Federal Power Commission staff.

By the COMMISSION: These are proceedings, under the provisions of § 5(a) of the Natural Gas Act, 15 USCA § 717d (a), for the determination of the reasonableness of the rates and charges of Kentucky West Virginia Gas Company (Kentucky) and Pittsburgh and West Virginia Gas Company (Pittsburgh)³ in connection with the transportation and sale of natural gas subject to the jurisdiction of this Commission. They

were initiated by the filing on March 17, 1945, by the city of Pittsburgh, Pennsylvania (Docket G-627), of a complaint alleging that the rates and charges at which Kentucky then sold natural gas to Pittsburgh, and the rates at which Pittsburgh then sold gas to Equitable Gas Company (Equitable), for distribution in the city of Pittsburgh, Pennsylvania, and the surrounding territory, were unjust and unreasonable and in contravention of the provisions of the Natural Gas Act. Upon the receipt of that complaint, this Commission issued an order instituting an investigation, consolidating the two proceedings, and fixing a date for the hearing thereon (Docket G-635).

Petitions to intervene in the proceeding were filed by the Administrator of the Office of Price Administration and the Economic Stabilization Director, the county of Allegheny of commonwealth of Pennsylvania, the state of West Virginia, the Board of Public Works of the state of West Virginia, and the Public Service Commission of West Virginia, all of which petitions were granted by this Commission.

Pursuant to our order an extensive field examination of the books, records, facilities, and operations of the re-

¹ Having replaced Leon Wald, Assistant City Solicitor, who appeared initially.

² Having succeeded Harry Littman who appeared initially.

³ Kentucky and Pittsburgh are herein collectively referred to as respondents.

FEDERAL POWER COMMISSION

spondents was made by our staff. The hearing upon the complaint and the order of investigation, in which all of the parties were permitted to participate fully, required a total of thirty-seven days during which thirty-one witnesses were examined, 4,320 pages of testimony were recorded, and 244 exhibits were offered, of which 226 were received in evidence. All of the parties likewise were permitted to file briefs and to argue the matter orally before the Commission sitting en banc.

Respondents' Operations.

Both Kentucky and Pittsburgh are West Virginia corporations, and Kentucky, Pittsburgh, Equitable, and Louisville Gas & Electric Company (Louisville) are all affiliated companies in the Standard Gas & Electric Company system.

Kentucky owns and operates extensive natural gas production, transmission, and distribution properties, including acreage and rights in fee and under lease, in eastern Kentucky; and purchases gas from numerous other producers in that area. Kentucky sells natural gas to eight gas utilities for resale and directly to a number of domestic and industrial users located on its pipe-line system. By far the larger part of its sales, however, are to two of its affiliated utilities, namely, Louisville and Pittsburgh. The deliveries to Pittsburgh are made to Warfield Natural Gas Company⁴ at two points within the state of Kentucky, and the gas is transported by that company from those points of receipt to the Kentucky-West Virginia state boundary where it is delivered to United

Fuel Gas Company for the account of Pittsburgh. United Fuel Gas Company in turn delivers to Pittsburgh at a point in Center county, West Virginia, an equivalent volume of natural gas.

Pittsburgh owns and operates a similar natural gas-pipe line system located in thirteen counties lying generally in the North Central portion of the state of West Virginia, adjacent to the Pennsylvania line. In addition to the production from its own wells, Pittsburgh, too, purchases natural gas from a number of other producers.

Of the 23,000,000 thousand cubic feet of natural gas which Pittsburgh purchased during 1945, 94.75 per cent was purchased from Kentucky and delivered to Pittsburgh by United at the point of delivery in Center county, West Virginia, to which reference has been made. Of Pittsburgh's natural gas sales during the year 1945, aggregating more than 30,000,000 thousand cubic feet, 94.01 per cent were sales to other utilities (90.71 per cent went to Equitable), 3.98 per cent were direct sales to industrial customers, and 2.01 per cent were sales to residential and commercial users.

The deliveries by Pittsburgh to Equitable are made at the West Virginia-Pennsylvania state boundary. At that point the gas is sold by Pittsburgh to Equitable at wholesale for distribution and resale by the latter to ultimate consumers in the state of Pennsylvania.

All jurisdictional questions have been waived by the respondents, it being agreed that if any reduction in rates of the Kentucky Company was found to be necessitated, such reduction should be allocated three-fourths

⁴ A nonaffiliate. Warfield Natural Gas Company was merged into United Fuel Gas Company on December 31, 1946.

PITTSBURGH v. PITTSBURGH & WEST VIRGINIA GAS CO.

to Pittsburgh and one-fourth to Louisville.

Reproduction Cost Evidence Excluded.

[1, 2] Each of respondents offered evidence of the market value of its natural gas acreage, the trended original cost, and reproduction cost of its operating properties, and Pittsburgh offered evidence with respect to changes in construction and commodity costs and in the purchasing power of the dollar. That evidence, however, was excluded by the trial examiner. Our study of the excluded evidence discloses that it is of the same nature as evidence which we have had occasion in other proceedings to characterize as "synthetic." It was not taken from the books and records, does not purport to represent actual cost of investment (Re Cities Service Gas Co. [1943] 3 FPC 459, 465, 50 PUR NS 65), and is too conjectural and illusory to be given any weight in these proceedings. (Cleveland v. Hope Nat. Gas Co. [1942] 3 FPC 150, 157, 44 PUR NS 1.) We are unable to find any basis for an alteration of our views with respect thereto and we find, therefore, that the exclusion of this evidence by the presiding Examiner was proper.

Field Price Evidence Excluded.

[3-5] Another facet of the value concept of rate regulation urged upon us by respondents was described as the "fair field price" theory. Specific evidence was presented by respondents based upon this theory, such evidence being rejected by the trial examiner. We deem it appropriate, in view of the controversy which this theory has evoked, to examine respondents' proposals in all of their as-

pects and to set forth briefly our views on the subject.

In essence, the field price theory presupposes a complete segregation of the production phase of a natural gas company's operations from its transportation business. Thus, the production operation is treated as a nonutility function free from regulation. The theory further presupposes the establishment of a "commodity value" or "field price" for all gas produced from the company's own wells and entering its transportation system, such price being allowed as an operating expense item in lieu of actual production cost. Respondents presented testimony and exhibits showing proposed field prices and the effect of their use upon the operating income of Kentucky and Pittsburgh. This evidence is before us on an offer of proof.

Kentucky claimed that 15 cents per thousand cubic feet was the present fair field price or commodity value of natural gas at the well mouth in the area in which it operates, and substituted this price for its actual cost of production. The net utility operating income reported by the company for the year 1945 of \$1,080,478 was thereby converted into a *computed deficit* for rate case purposes of \$594,715. In other words, whereas the company enjoyed a substantial profit, it would have us consider it suffered a loss for the purpose of determining just and reasonable rates. Similarly, Pittsburgh proposed an allowance of 17 cents per thousand cubic feet as the field price of its produced gas which would reduce its reported net utility operating income for the year 1945 of \$662,217 to \$174,359.

Hereinafter we have found that Ken-

FEDERAL POWER COMMISSION

tucky's cost of service, including as a part thereof a 6 per cent return for the year 1945, was \$3,931,204. If the claimed field price of gas is substituted for the actual cost, then the computed cost of service becomes \$6,633,077, an increase of \$2,701,873. Allowance of this increase would mean an increase of profit in the amount of \$1,664,426 to Kentucky after paying the income taxes on that profit. For Pittsburgh the actual cost of service including 6 per cent return, would be changed from \$8,742,730 to a computed cost, using the 17-cent field price mentioned above for gas produced by the company, of \$8,577,688, or a decrease of \$165,042.

Thus, it is evident that so far as Kentucky is concerned, the use of the field price in lieu of the actual cost of production in fixing rates would have the effect of substantially increasing the company's allowable net utility operating income, whereas Pittsburgh, on the other hand, would receive a smaller net income through substitution of the field price for actual cost of production.

The ultimate effect of substituting the field price theory for the cost or investment basis in determining just and reasonable rates for respondents would be an annual increase in rates to Louisville Gas & Electric Company of \$532,647 and to Equitable Gas Company of \$1,651,561. The inequity of such increases would result not by reason of added costs but from additional profits to Kentucky over and above a fair return on its investment in properties used to render a public

service together with the income taxes associated with such profits.

So much for the results of the application of this theory to the instant case. We now turn to the reasons advanced in support of the theory and whether such theory is sound, equitable, and in the public interest.

Respondents take the position that the natural gas business is a highly venturesome and speculative enterprise and that the application of the cost method of regulation which we have heretofore followed does not produce a just and reasonable end result. Reference is made by respondents to the fact that Kentucky purchased large areas of productive acreage at extremely low prices in the early days of discovery of natural gas in the area, and that they should be rewarded for the initiative and daring shown in the initial stages of the project.

What respondents desire is a return based on the fair value of their natural gas production properties. It is conceded by respondents that this may be achieved through including in the rate base the fair market value of their natural gas acreage⁵ or by including as an operating expense item the commodity value of the gas produced from such acreage.

We previously have had occasion to consider the infirmities and inequities of the fair value theory and there is no need to lengthen this opinion with a repetition of our views. Suffice it to say that these same infirmities and inequities likewise exist in this variant of the fair value theory and the arguments advanced by respondents on be-

⁵ Respondents offered evidence to show that the fair market value of their natural gas acreage as of December 31, 1944, amounted to

\$20,118,194, whereas the original cost thereof was \$4,100,705.

PITTSBURGH v. PITTSBURGH & WEST VIRGINIA GAS CO.

half of the field price method, as applied to production property, are no more persuasive than their arguments for the use of reproduction cost for pipe lines and other property. We reiterate our adherence to the principles of rate making enunciated by Mr. Justice Brandeis in the *Southwestern Bell Case*, 262 US 276, 289, 67 L ed 981, PUR1923C 193, 43 S Ct 544, 31 ALR 807, which were intended to assure the utility investor that he would receive a fair return on his investment devoted to the public service and that the consumer would not be compelled to pay a return upon an increment of value above such investment.

Respondents ask "Are not the higher prices allowed to others furnishing gas from the same areas a proper matter of consideration? . . . In the consideration of the just end result should not consideration be given to what is a fair level (the fair average) of prices for natural gas in this area?"⁶ The answers to these questions involve basic regulatory principles. Experience has shown that a natural gas company must secure, at the outset, an adequate supply of gas sufficient to take care of its markets for a period of twenty to forty years. This is a necessary prerequisite to the financing and construction of a pipe-line system. Respondents, as have many other natural gas companies, chose to acquire by lease or purchase gas acreage from which to produce part of their market requirements and to purchase the balance through long-term gas purchase contracts from other producers. In some instances, these gas purchase contracts specify what are

now considered as very low prices. But respondents have not suggested that we set aside those gas purchase contracts and allow as an operating expense the present-day commodity value of the gas purchased from these producers in lieu of its actual cost.

If natural gas is to be treated as a commodity rather than as a utility service, we perceive neither logic nor consistency in pricing gas produced by the utility from its own wells on the basis of its value as a commodity and pricing the gas purchased from other producers on the basis of its actual cost to the utility. If, as respondents claim, the commodity value theory is a means of rewarding management for its initiative and foresight in securing productive natural gas acreage, should not such theory likewise serve to reward management for securing advantageous gas purchase contracts?

It may be argued that prices paid other producers for natural gas already reflect the value of such gas as a commodity. But it is clear that the prices specified in gas purchase contracts rarely reflect, except at the time of their execution, the results of the law of supply and demand. A true commodity value for natural gas cannot exist unless there are frequent adjustments in the price consistent with the ever-changing supply and demand factors. The very nature of the natural gas business precludes short-term contractual obligations and repeated price adjustments to meet such changes.

But assuming arguendo that the contrary be true, the more important question is whether a natural gas company is in a status similar to the nonutility

⁶ The weighted average cost of gas purchased at the well head by respondents for the

year 1945 was approximately 13.1 cents per thousand cubic feet.

FEDERAL POWER COMMISSION

producer concerning markets, franchise rights, and financial risks. The answer is clearly in the negative. Natural gas companies are public utilities. They have assured markets, protected by either local or Federal franchises or both, and their financial risks are slight, for regulatory agencies are duty bound to fix rates which will be compensatory. Nonutility producers do not have any of these benefits but must secure such outlets for their gas as may be possible through contractual arrangements with pipe-line companies or others, at prices which may or may not be compensatory. If these producers find that their contract prices do not cover their costs of operation and also return a fair profit, there are no regulatory agencies to which they can look for relief. The risks described by respondents as inherent to the highly venturesome and speculative gas business may well apply to the small wild-cat drillers, who may go bankrupt through drilling a series of dry holes, but is truly inapplicable to natural gas companies such as respondents.

In this case, as in all other rate proceedings, we have allowed as proper operating expenses, to be borne by the consumers, all costs of dry-hole well drilling and exploration activities, and all expenses incident to the acquisition of leaseholds, including delay rentals and royalty payments. With respect to Kentucky we have allowed annual exploration and development costs of \$217,906 and to Pittsburgh \$292,971 for this item. We have also included in the rate base the cost of gas acreage held for future use by Kentucky and Pittsburgh companies amounting in the aggregate to \$2,187,774. Thus it

is readily apparent that respondents' risks, associated with the exploration and development costs of a natural gas supply, have in effect been underwritten by the ratepayers.

Apparently, respondents take the position that the consumers who for many years have paid through rates the costs associated with the acquisition and development of a gas supply, should now be foreclosed from any future benefits therefrom and should purchase their gas in the future as if all of these costs had been borne by respondents' stockholders. Obviously such a scheme is entirely devoid of equity and fair play.

One other phase of this matter which deserves attention relates to the fact that application of the field price method to the Pittsburgh Company would result in a smaller actual net income than does the cost basis. This is true because the unit cost of production is higher than the field price. It was this sort of situation which led sponsors of legislation⁷ to amend the Natural Gas Act to propose that natural gas companies be given the option to use either the field price method or the cost method. In other words, what was being sought was a privilege for the pipe-line companies to use either cost or value, whichever was higher. Thus, one of the infirmities of the value concept of regulation was openly admitted. The value concept will not work when value is lower than cost for it is self-evident that unless a utility is able to recover through rates all of its bona fide costs of operation, including a reasonable return, it cannot successfully continue to serve

⁷ HR 4051 and S 734, 80th Congress, First Session.

PITTSBURGH v. PITTSBURGH & WEST VIRGINIA GAS CO.

the public. We adopted the cost system because we believed it to be just to consumers and utilities alike, and this system will serve, we believe, during periods of depression or inflation to secure the continuity of an adequate gas supply and the financial soundness of the natural gas companies themselves. The wisdom of our decision has been amply demonstrated through the unprecedented growth of the industry under such regulatory methods and by the avidity with which the investing public has purchased tremendous amounts of natural gas securities in recent years at progressively lower costs of financing.

We find therefore it is not necessary in the light of the Natural Gas Act and the decisions of the Supreme Court⁸ to use the field price method. Further, we deem that the public interest will be best served through continued adherence to the cost method of regulation and its application to the production of natural gas by natural gas companies. It is therefore clear that the exclusion from evidence of testimony relating to the field price of natural gas by the trial examiner was proper and we so find.

Original Cost of Facilities.

After extensive investigation and review, agreements were reached by the staff of the Commission and the respondents with respect to the original cost of the facilities used and useful in the service of natural gas and the working capital which would reasonably be required.

Depreciation and Depletion.

With respect to Pittsburgh, the annual charges and a proper reserve for accrued depreciation and depletion reserves were agreed to. That the depreciation and depletion reserves of Kentucky are excessive is admitted, and thus there is necessitated the determination of reasonable reserve requirements for that respondent. (Re Interstate Power Co. [1939] 2 FPC 71, 81, 32 PUR NS 1.)

[6] Depreciation of Field Lines.

The staff found that a service life of fifty years and a resulting depreciation rate of 2 per cent would be appropriate for the purpose of determining the reserve requirement for mains. But when it came to the determination of the depreciation rate for field lines, due consideration was given to losses which are realized when pipe is moved from one location to another, and a rate of 3.33 per cent was found appropriate.

Initially, Kentucky's witness proposed a service life of twenty-five years and a depreciation rate of 4 per cent as appropriate for both mains and field lines. From a "survivor" table the witness spotted points of retirement on probability paper and fitted a curve to them. In this way he derived the mortality curve from which he arrived at his final conclusions with respect to service lives and rates of depreciation for these two classes of property. Thus the principal, if not the only consideration, was the retirement history of Kentucky's properties. Later this witness submitted an amended study

⁸ Federal Power Commission v. Hope Nat. Gas Co. (1944) 320 US 591, 88 L ed 333, 51 PUR NS 193, 64 S Ct 281; Canadian River Gas Co. v. Federal Power Commission (1945) 324 US 581, 89 L ed 1206, 58 PUR NS 65,

65 S Ct 829; Panhandle Eastern Pipe Line Co. v. Federal Power Commission (1945) 324 US 635, 89 L ed 1241, 58 PUR NS 100, 65 S Ct 821.

FEDERAL POWER COMMISSION

in which important changes were made in the rates which he had previously recommended. In the amended study all adjustments were downward except with respect to the rate for field lines.

Furthermore, while Kentucky does not deny that its witness included in his determination retirement data representing the sale of certain property by the company which should not have been included, and while conceding that the elimination of this data would raise the service life of field lines from 22.5 years to 24 years, they contend that no change should be made in the rate which he proposed. While they do not deny that the witness erroneously considered property acquired in 1927 as having been installed at that date when, in fact, it had been installed at an earlier date, they contend that the amount here involved was not sufficient to require an alteration of this proposed rate. Nor can it be denied that the witness made numerous mathematical and other errors in his calculations. But in spite of the admitted errors, Kentucky continues to insist that the rates proposed by this witness are the rates which the Commission should adopt and apply. On the other hand, the company claims that our staff used "life tables," intimating that it gave no consideration whatever to the company's mortality experience. The record shows, however, that consideration was given to the experience of the company, but that the staff rates were not based upon that experience alone. Other factors, such as the retirement experience of other companies and the future life expectancy of natural gas reserves, were given due and proper consideration.

The evidence requires the conclusion and we find that the rate of depreciation of field lines proposed by the staff is the appropriate rate for the purpose of determining annual depreciation expense and the reserve requirements for that classification of property.

[7] *Gas Well Equipment.* Kentucky contends that gas well equipment should be depleted, while it is the contention of the staff that the reserve for this classification of properties should be determined on a depreciation basis. While Pittsburgh has made it the practice to depreciate gas well equipment, Kentucky has applied the depletion method. Respondents contend that due to the fact that Kentucky "has been in existence for only about twenty years and has a remaining life of about thirty-three years, the possibilities of re-use of the materials are not nearly so great as in some other natural gas operations . . . and to the extent that this is true it largely eliminates a second and a third use of such materials and supports the treatment of the item as a depletable rather than a depreciable one."

A study of Kentucky's well retirement records shows that in the past the average cost of abandoning a well has been approximately equal to the average salvage recovery. But well equipment recovered from abandoned wells may be used in other wells or the casing or tubing may be used during a part of its physical life as pipe line, and it is conceded by the respondent that gas well equipment is used more than once in the Kentucky system. The testimony that the salvage recoverable from wells equals the cost of abandonment seems to demonstrate

PITTSBURGH v. PITTSBURGH & WEST VIRGINIA GAS CO.

conclusively that gas well equipment is, quite generally, used more than once.

The staff study considered that the life of tubular goods (comprising about 92 per cent of the total investment in gas well equipment) both physically and functionally, largely controls the average life of this group of properties. Those studies included studies reflecting the physical life of such equipment. In addition, studies were made to determine the average age of currently active and abandoned wells, and of losses on equipment realized when wells are abandoned, and due consideration was given to the data disclosed by those studies. It was concluded that since gas well equipment has been, and will continue to be, used more than once, thus reflecting the fact that the physical and functional life of such equipment had not completely expired during the first cycle of use, the application of the depreciation rather than the depletion method of determining the reserve requirement was necessitated.

The fact that heretofore Kentucky has determined a value for the recovered equipment which it considered equal to the cost of abandonment, is considered of no significance. The staff has made full allowance for the costs of abandoning wells but separately and apart from the determination of reserve requirements applicable to gas well equipment. The staff's method of determining the proper reserves for gas well equipment will return to Kentucky in due time the entire cost of equipment as well as the costs of abandonment. The method proposed by the company will also have that result, provided that the salvage recovered

continues to equal the cost of abandonment. But the evidence shows that the salvage recoverable continues to diminish. When it becomes, as it must, less than the cost of abandonment, the reserve which has been accrued will not fully provide for those costs.

It is found, therefore, that the method of accruing the reserve for gas well equipment proposed by the staff is the appropriate method for that purpose.

[8] *Reserves from Deeper Drilling.* Both Kentucky and the staff of the Commission calculated depletion rates by the production method. Although the estimates of the production from individual wells were not in universal agreement, the company's and the staff's estimates of the total reserves to be recovered from existing wells, except that estimated to be recovered from the deeper drilling of existing wells, were quite close.

Out of twenty-four shallow wells deepened during the years 1941 to 1944, inclusive, twenty proved productive, and the average ultimate productivity of those deepened wells was found to be approximately 200,000,000 cubic feet each. The evidence presented by the staff is to the effect that out of its 159 presently producing shallow wells, Kentucky will deepen the equivalent of 63. The staff then applied the average productivity of deepened wells to 63 wells to be deepened, and has increased the estimate of Kentucky's remaining reserves by 12,600,000 thousand cubic feet as from that source, and has accrued Kentucky's depletion reserve on the basis of the increased estimate.

Kentucky objects to the inclusion

FEDERAL POWER COMMISSION

of the reserves from deeper drilling as tending to reduce current depletion allowance and to require an increase later when the deeper drilling costs have been incurred.

Kentucky has not undertaken to deny that it will deepen the equivalent of approximately 63 wells but, on the contrary, did assume that certain wells would be deepened. Neither has Kentucky undertaken to show by any type of evidence that the estimates of the probable recovery from those wells is unreasonably high. It is recognized that the deepening of wells may increase the ultimate recovery of gas per acre.

It is believed to be improper to include in the depletion base costs which have not yet been incurred. On the other hand, when a shallow well becomes exhausted and is drilled to a deeper formation, the original hole continues to perform a useful and valuable function, and its cost should be spread over its useful life. But to deplete the costs which have already been incurred over the life of reserves recoverable from upper levels *only* would leave, upon the exhaustion of its reserves, no costs to be applied to the production from the lower levels. The inclusion of the reserves from deeper drilling at the time of the completion of the shallow well has the effect of deferring the appropriate portions of the cost until production begins from the lower level. Thus there is a more even distribution of the cost of the well over the useful life thereof.

We find that the inclusion of the probable reserves to be recovered from deeper drilling in the estimates of Ken-

tucky's probable ultimate recoverable reserves for the purpose of determining the proper depletion rate and proper depletion reserve requirement in the manner proposed by the staff is fair, reasonable, and proper.

[9] *The Proper Depletion Rates.* The method employed by the staff in this proceeding for the determination of the proper rate of depletion and the appropriate reserve requirement for depletion, is the same as that heretofore used and applied in all similar cases of this kind coming before the Commission, and as so calculated and determined, the annual allowance for depletion will reimburse the company for its entire investment in the related properties over the service life thereof. The evidence presented by Kentucky shows that regardless of minor differences of approach (and exclusive of such differences as are attributable to the inclusion by the staff of reserves from deeper drilling discussed and disposed of above) the rates of, and the annual allowances for, depletion recommended by the staff for the year 1946 and the years prior thereto, exceed the rates and allowance claimed by the company for those years.

But Kentucky proposes the use of an average of rates which rise year by year (1946 to 1950, inclusive), and in support of that formula, offered evidence purporting to show that the unit cost of the development of gas has arisen substantially in recent years, and will continue to rise. It is contended that by reason thereof the rate and allowance proposed by the staff will not compensate the company for its increased costs.

The reasons advanced for the increase in the unit cost of developing

PITTSBURGH v. PITTSBURGH & WEST VIRGINIA GAS CO.

gas are said to be primarily (1) the increase in the cost per well, and (2) the decrease in the reserves developed per well. The evidence shows that prior to 1942 there were substantial variations from year to year in the average cost (construction and equipment) of wells drilled each year. There was not, however, any definite trend, either up or down, in those average costs. Likewise, the unit cost of the development of the recoverable reserves shows substantial variations from year to year in the same period. There again, although costs were definitely higher in the later years, there was no definite or marked trend until 1942. During the years 1942 to 1945, inclusive, the average cost per well drilled (construction and equipment) increased almost 33 per cent; but during the same period the unit cost of recoverable gas based upon the estimates of reserves developed during each of the years, increased almost 107 per cent. Thus the *major* factor contributing to the increase in unit cost is the decline in the estimates of reserves. It is true that there is substantial agreement between the company and the staff with respect to these estimates, but there are also reflected in the record other circumstances bearing thereon which must be given due consideration.

The estimates of recoverable gas per well show increases from 431,566 thousand cubic feet in 1930 to 800,216 thousand cubic feet in 1933, but subsequently they declined to 220,127 thousand cubic feet for 1945. The evidence shows that for the more recently drilled wells little production data are available, and as a consequence the estimates of the gas which may be

ultimately recovered from them must be purely judgment figures. Of course, as time goes on, more and more data become available, until it is possible to plot a pressure decline curve. But even then the curve is subject to periodic correction and it is only after the expiration of considerable time that a reasonably accurate estimate is possible. Just what the problem is and how it is met in practice is shown quite graphically by one of the company's exhibits.⁹ There it is shown that between 1934 and 1942 revisions in the estimates of the ultimate recovery from a well drilled in 1930 were necessitated by the intervening experience with the result that they were increased from 262,000 thousand cubic feet to 470,000 thousand cubic feet. The estimate of another well drilled in 1935 was increased from 970,000 thousand cubic feet in 1936 to 2,360,000 thousand cubic feet in 1944. Of course, some of the experience called for revisions downward, but that the prevailing revisions are upward and that the judgment estimates for the more recent years are more often than not substantially too low, is made crystal clear by another of the company's exhibits.¹⁰ It shows that for the years 1936 to 1945, inclusive, the company's geologists made revisions of their estimates of the ultimate recovery from 1,454 of its wells. Of those revisions, 1,107 were upward and only 347 were downward. The over-all effect of those revisions was to increase the estimates of recoverable reserves a total of 118,553,300 thousand cubic feet, while the decrease was 34,329,800 thousand cubic feet, a

⁹ Exhibit No. 55.

¹⁰ Exhibit No. 56.

FEDERAL POWER COMMISSION

net gain of 84,223,400 thousand cubic feet. This evidence clearly shows that the estimates of reserves recoverable from the more recently completed wells are unreasonably low and that caution should be employed in using them for the purpose of estimating the unit cost of developing such gas over the future.

The average cost per well and the unit cost of recoverable reserves for the years up to and including 1945 are, as has been seen, adequately provided for in the staff's rates and allowances. Kentucky's estimates of the average cost of wells to be drilled in the years 1946 to 1950, inclusive, show an increase in such costs of only 6.30 per cent above 1945 costs. Strangely enough, the estimate of the recovery per well for that period shows an increase of about 13.5 per cent, and the cost per thousand cubic feet shows a decrease of 6.5 per cent. Consequently, we find that the rates of depreciation and the allowances for depletion proposed by the staff are adequate for the purpose of determining a reasonable allowance for depletion expense and a reasonable depletion reserve requirement.

[10] *Amortization.* It has been the practice of the company in the past to provide for the expense relating to wildcat acreage through its depletion accrual and for that purpose its witness increased his proposed rate of depletion from 4.5 cents to 4.6 cents per thousand cubic feet. At such a rate the amount which would have been accrued for that purpose for the year 1945 is \$24,777.65.

The staff proposes the amortization of Wildcat Acreage, Natural Gas Rights at the rate of \$21,198.13 a year, and to allow as an operating reve-

nue deduction the cost of leases actually abandoned during each year. The aggregate of the allowances by the staff for the year 1945 is \$31,937.24. This method of handling these items is in accordance with the Commission's Uniform System of Accounts Prescribed for Natural Gas Companies. No reason has been advanced for deviating therefrom in this instance.

It is our conclusion and we find that the staff's proposed rates and allowance for depreciation, depletion, and amortization, and the methods employed by the staff in determining the reserve requirements for Kentucky, are fair, reasonable, equitable, and appropriate.

Respondents' Investment Rate Bases.

Employing the figures agreed upon and as heretofore determined, we find that the investment rate base of each of the respondents as of December 31, 1945, is as follows:

	Kentucky	Pittsburgh
Gas Plant in Service	\$20,291,927	\$26,743,718
Gas Plant Leased to others	66,951	
Total Gas Plant in Service	\$20,358,878	\$26,743,718
Less:		
Existing Depreciation and Depletion	8,968,043	14,301,084
Reserves for Abandoned Leases ..	334,472	
Total Depreciation and Depletion ..	\$ 9,302,515	\$14,301,084
	\$11,056,363	\$12,442,634
Construction Work in Progress		294,374*
Gas Plant Held for Future Use	2,070,787	116,987
Total Investment in Gas Plant	\$13,127,150	\$12,853,995
Working Capital ..	516,849	1,382,946
Total Investment Rate Base	\$13,643,999	\$14,236,941
* Completed projects in service at December 31, 1945.		

PITTSBURGH v. PITTSBURGH & WEST VIRGINIA GAS CO.

Rate of Return.

[11] Voluminous evidence with respect to rate of return was submitted by the complainant, OPA, the respondents, and the staff of the Commission. Respondents presented evidence to the effect that reasonable rates of return for Kentucky and Pittsburgh would be $7\frac{1}{2}$ per cent and 8 per cent, respectively, thus indicating that Kentucky is in a somewhat more favorable position than Pittsburgh from the standpoint of financing. On the other hand, evidence presented by OPA is that an over-all rate to Pittsburgh of 5.6 per cent would be the maximum reasonable rate of return.

The evidence shows convincingly that the earning capacity of utilities is much more stable than that of industrial and railroad enterprises; that the natural gas industry in general is growing steadily and rapidly and is in a favorable situation from a financial standpoint; that the regulation of natural gas companies under the Natural Gas Act is having a seasoning effect upon the securities of such companies; and that their securities are becoming more desirable to the investor. During recent years, natural gas companies have been able to place senior securities at very low rates, and the evidence indicates that they will be able to continue to do so for some time to come.

The evidence presented by Kentucky indicates that its reserves have an estimated life of some thirty-five years. Kentucky's only important customer other than Pittsburgh, namely, Louisville Gas & Electric Company, serves a stable and well-established market. Kentucky's president is responsible for the statement that "Our position is unique, not only from the standpoint

of the amount of reserves available to us but from the standpoint of the proximity of these reserves to both our market and the Louisville Gas & Electric Company's market." He stated further that even if respondents' present markets, namely, Louisville and Pittsburgh, were taken away, respondents would have no difficulty in marketing their gas in a competitive market.

Pittsburgh's only important customer, Equitable Gas Company, also serves an established market. The affiliation of the respondents with their principal distributors virtually assures the continuation of the service relationship between them. In the light of the foregoing, we find that a 6 per cent rate to each of the respondents herein is the maximum reasonable rate which could be allowed. Application of such rate to the investment rate bases which we have heretofore determined will allow a return to Kentucky of \$818,640 and to Pittsburgh, \$854,216.

Test Period.

There is in the record evidence of the rate base, depreciation, working capital, revenues, and costs of service of the two respondents for the years 1944 and 1945. That with respect to the year 1944 shows that Kentucky's revenues exceeded its costs of service, including 6 per cent return, by more than one million dollars, and Pittsburgh's revenues in turn exceeded its costs of service by approximately three-quarter million dollars. These were the operations upon which the complainant, the city of Pittsburgh, predicated its charges that the rates of the respondents were unreasonable and un-

FEDERAL POWER COMMISSION

lawful. Thus, had the situation which existed shortly prior to the filing of the complaint continued, a substantial reduction in rates would have been indicated now. However in the light of subsequent events, we reach the conclusion that the respondent companies' operating experiences for the year 1944 do not typify the experiences which may be anticipated during the period for which rates would now be fixed. The evidence is convincing that sales, revenues, and costs for the year 1945 afford a more realistic and equitable test of the reasonableness of respondents' current rates, but, as will be indicated in more detail later on, even these costs must be subjected to some adjustments. We find that respondents' operating experience for the year 1945, as so adjusted, will afford a fair and reasonable guide for the future.

Respondents' Revenues and Costs of Service.

With minor adjustments to book figures concerning which there appears to be no dispute, the respondents' operating revenues, costs and net utility income for the year 1945 were as follows:

	<i>Kentucky</i>	<i>Pittsburgh</i>
Operating Revenues ...	\$4,502,488	\$8,340,562
Operating Revenue Deductions	2,908,402	7,423,882
Net Operating Revenues	1,594,086	916,680
Exploration and Development Costs	217,906	305,000
Net Utility Income	\$1,376,180	\$ 611,680

It is the contention of the staff that if Kentucky's net utility income set out above were further adjusted to reflect the state and Federal income

taxes which that respondent would have been required to pay had it earned an amount no greater than a reasonable rate on its investment rate base (which adjustment would be in the amount of \$161,188) the experience of the two respondents for the year 1945 would provide a fair and proper test for the reasonableness of their respective rates.

[12] *Increases in Costs of Service.* Pittsburgh contends, however, that, even if its revenues for the year 1945 were used for test purposes, the costs of service for that year do not properly reflect the costs which will be incurred in subsequent years. Respondent offered evidence to show that on October 18, 1946, the price in all its gas purchase contracts, except with reference to purchases from Kentucky, was increased to a minimum of 16 cents per thousand cubic feet, and that thereby its operating expenses for the year 1945 would have been increased by the amount of \$27,623.50. Its evidence also shows that there became effective on September 1, 1945, an 18-cents per hour increase in wages to general department employees; that on January 1, 1946, there became effective a general wage increase, and that still other wage adjustments were made in September, October, and November, 1946. Had those increases been effective for the full year 1945, Pittsburgh's labor expenses would have been increased to the extent of \$138,100. In connection with its increased labor costs, there were required increases in annuity costs and in social security taxes which for the full year 1945 would have amounted to \$2,762 and \$3,176, respectively.

On the other hand, the staff used

PITTSBURGH v. PITTSBURGH & WEST VIRGINIA GAS CO.

an exploration and development costs for 1945 Pittsburgh's estimate of its 1946 cost rather than the 1945 book cost, and the 1946 estimate proved to be excessive in the amount of \$12,029. Pittsburgh recognizes the propriety of substituting for the excessive estimate the actual¹¹ costs incurred in 1946.

This Commission has established a policy of allowing as cost of service, all legitimate expenditures for gas, labor, taxes, and other items of expense which were incurred during the test period, or which it is known would have been incurred had the subsequently established costs been in effect during the test period; provided that the evidence does not show an excess of future revenues over future costs of service as would offset or absorb such known and experienced increases in costs. Re Mississippi River Fuel Corp. (1945) 4 FPC 340, 347, 63 PUR NS 89; Re Cities Service Gas Co. (1943) 3 FPC 459, 485, 50 PUR NS 65; Re Canadian River Gas Co. (1942) 3 FPC 32, 56, 43 PUR NS 205; Columbus v. United Fuel Gas Co. (1946) Opinion No. 145, 67 PUR NS 161.

It is found that the increases in cost of gas, cost of labor, and cost of taxes set out above should be allowed and added to the cost of service experienced by Pittsburgh in the year 1945, as adjusted by the staff, for the purpose of testing the reasonableness of its present and future rates. Adjusted further to include those increases, we find that Pittsburgh's cost of service for the test year is \$8,742,730 or \$402,169 in excess of its operating revenues, assuming for the moment of

the reasonableness of present payments to Kentucky.

But in addition to and aside from all known and actually experienced increases in cost of service, respondent Pittsburgh purports to be fearful of a further increase in labor expenses for the year 1947 and subsequent years in an amount as great as \$130,000. Counsel for Pittsburgh suggest other possibilities tending to greatly increase its costs and to the possibilities of a decline in its business. For example, one witness for respondents expressed the opinion that the pent-up demand following the termination of the war would likely be caught up with in 1947 and 1948 and would result in a slackening of business in these years. Further, that the pent-up demand for automobiles, refrigerators, and other appliances generally would be entirely dissipated some time in 1948. Apart from the patent unreliability of such forecasts the matters involved are so uncertain and conjectural that they cannot be adjusted for in this proceeding. If and when situations arise which clearly affect a utility's costs of service, a remedy is available by which necessary and appropriate adjustments in rates can be secured.

Kentucky, likewise, offered evidence that in 1945 and in 1946 it experienced increases in certain of its cost which are not fully reflected in the book figures for 1945. There were, in those years, increases in labor costs not related in any way to increase in volume of sales or in revenues, which, had they been in effect for the full year 1945, would have resulted in an increase in costs of service to the extent of \$100,944. There was, also, an increase in Kentucky's state taxes,

¹¹ To be exact, eleven months' actual and one month estimated.

FEDERAL POWER COMMISSION

which, had the increased rates been in effect for the year 1945, would have increased Kentucky's costs of service by \$46,500. These increases in costs should be reflected, as in the case of Pittsburgh, in Kentucky's costs of service for the test period.

[13] The record does not disclose Kentucky's net taxable income for the year 1945, but if we assume, as we reasonably may, that the allowable tax deductions were approximately the same in 1945 as in 1944, and assuming that Kentucky's income were not permitted to exceed its cost of service, including a return of 6 per cent, no Federal income tax payment would be required. Since the deductions allowed for state income tax purposes appear to have been even greater, no state income tax would have been paid. Reducing Kentucky's operating revenue deductions by an amount equal to the aggregate of the accruals for Federal and state income taxes, and for Federal capital stock taxes (the latter of which is no longer effective) paid and accrued in 1945, namely \$161,187.50, no part of which is properly includible in the cost of service for test purposes, and increasing other state taxes in the amount of \$46,500, as shown above, we find that Kentucky's cost of service, inclusive of a 6 per cent return for the test period would be \$3,931,204. We further find that the excess of Kentucky's utility revenues over the cost of service for the test period would be \$571,284.

Rate Reductions Required.

It was proposed by counsel for the respondents to which no objection was made that if it were found that Ken-

tucky's utility revenues exceeded its cost of service, including, of course, a reasonable return, a division of such excess in the proportion of 25 per cent to Louisville, and 75 per cent to Pittsburgh would be fair and equitable. No evidence was offered by anyone directed to a division among all of Kentucky's consumers of any such excess. The only evidence with respect thereto is sales to those utilities. On the basis of the allocation proposed by respondents' counsel, which in the absence of more specific evidence on the point must be used here, we find that \$142,821 of the \$571,284 by which Kentucky's utility revenues are found to exceed its costs of service for the test period is attributable to Kentucky's sales to Louisville, and \$428,463 is attributable to its sales to Pittsburgh.

We have found, however, that Pittsburgh's costs of service for the test period exceed its utility revenues by the amount of \$402,169. Assuming a reduction in Kentucky's rates to Pittsburgh and an equivalent reduction in Pittsburgh's costs of gas purchased for the test year, Pittsburgh's utility income would have exceeded its cost of service in the amount of \$26,294.

Pursuant to agreement between counsel for all of the parties including counsel for the Public Utility Commission of West Virginia, no evidence was offered with respect to the allocation of facilities, revenues, expenses, or otherwise between those used for, or derived from, interstate as distinguished from intrastate business. However, at the Oral Argument, counsel for the West Virginia Commission claimed on behalf of Pittsburgh's intrastate customers their share of any reduction in the latter's rates which

PITTSBURGH v. PITTSBURGH & WEST VIRGINIA GAS CO.

might result from our order in this proceeding. The record discloses that in 1945 approximately 90 per cent of Pittsburgh's sales were to Equitable and were, therefore, interstate in character. The remaining sales appear to have been made within the state of West Virginia. If an allocation of the excess of Pittsburgh's utility income over cost of service in the amount of \$26,294, as set out above, were made on such a basis, there would be attributable to the West Virginia sales the amount of \$2,629. It is believed, however, that, under the circumstances in this case, it would not be practicable to require Pittsburgh to put into effect rate schedules which would bring about a reduction in its revenues in so small an amount as the excess here indicated and we so find.

It is concluded only, therefore, that Kentucky's rates are excessive in the amount of \$571,284, of which \$142,821 are attributable to, and should be reflected in a reduction of, its rates to Louisville Gas & Electric Company, and \$428,463 in its rates to Pittsburgh and West Virginia Gas Company, and that Kentucky should file schedules to effect such reduction in a form satisfactory to the Commission.

An appropriate order will issue in accordance with this opinion.

WIMBERLY and SMITH, Commissioners, dissenting: We are unable to concur in the opinion and order of the majority.

This case was started early in 1945, on complaint of the city of Pittsburgh, at a time when it appeared that the earnings of the respondents were excessive, and therefore that a reduction of the Pittsburgh city-gate rate might

be in order. Using data for the year 1945, adopted as the test period, with some adjustments to reflect certain changes in costs known to have occurred during 1945 and 1946, but with scant, if any, consideration on the record of more recent conditions, the majority concludes that no such reduction is now possible. As to this aspect of the matter, the action will have no effect upon consumer rates in the Pittsburgh area. The result is confined to intercompany adjustments between the affiliated Pittsburgh and Kentucky companies, which will, of course, have to be reconsidered in the light of whatever conditions prevail at any time when the Pittsburgh gate rates are in question.

The reduction ordered prospectively on this record in the rates of Kentucky to another affiliate, Louisville, rests, in our opinion, upon a very insecure foundation.

The jurisdictional basis for this order was not fully developed upon the record because of counsels' stipulation waiving the troublesome question of cost allocation and statements made by respondent in this connection that about 98 per cent of Kentucky's total sales (necessarily including the sales to Louisville) were jurisdictional and that 25 per cent of any reduction in Kentucky's rates should be attributed to its sales to Louisville. This stipulation further provided, however, that it was "in no wise an admission that this Commission has jurisdiction over any intrastate transactions or sales of respondents." With all of Kentucky's gas produced in Kentucky and its transportation to Louisville being wholly within that state, it appears that this Commission's rate ju-

FEDERAL POWER COMMISSION

jurisdiction would have to derive from the fact that some small portion of the gas is presumably then transported and resold in mixed form by Louisville to certain Indiana distributors.¹ The company's admissions and its tariff filing practices lend semblance of support to the Commission's order. It does not, however, seem to us appropriate for the Commission to assert on such a basis jurisdiction over rates on all the natural gas sold by the Kentucky company to Louisville, since all of such gas is produced within Kentucky and all but a small fraction of it is distributed locally within the city of Louisville. The Commission's jurisdiction derives from the Congress, as prescribed in the Natural Gas Act, and not from agreements or actions of a natural gas company or any other party in this or any other proceeding.

We agree that the exclusion of the company's reproduction cost studies was correct, but we are not satisfied that the majority's application of the cost method is entirely proper and consistent: for example, in the case of the Kentucky Company, including estimated prospective reserves from future deep drilling of shallow wells but ignoring the estimated additional costs thereof, and failing to make any allowance beyond 1945 for the indicated increasing trend of gas production costs. In this connection the

Commission's conclusion in the recent United Fuel Case seems pertinent: ". . . It is evident, therefore, that we cannot fix rates for the future upon the basis of the company's actual experience in 1942 and 1943 but, because of the great change which has occurred and is still in process, must consider the latest available facts as well as expectancies of the relatively near future."²

In any event, however, we could not join in the effort of the majority to draw from rejected evidence concerning gas prices in the field conclusions as to what effects might follow from the application of any such standard to the gas production operations of the Kentucky company. There is no proper basis for sound conclusions as to what effect, if any, a reasonable application of such a standard would have on the rates of these companies. We believe that an analysis of such effect should be based upon a fully developed record, rather than relying simply on statements of counsel and offers of proof. We are of the opinion that actual clarifying evidence as to the result of giving some weight to the value of company-produced gas should have been admitted, thus affording all parties and the Commission full opportunity to test, analyze, and consider it in an appropriate manner.

OLDS, Commissioner, concurring:

¹ According to Louisville's annual report to this Commission such sales to Indiana Gas and Water Company and to Indiana Utilities Corporation in 1947 constituted about 5 per cent of the total gas sales of Louisville, which in that year purchased its natural gas from Kentucky (5,780,050 thousand cubic feet), and Tennessee Gas Transmission Company (4,149,356 thousand cubic feet), with some incidental exchange gas from United Fuel Gas Company (96,975 thousand cubic feet).

² Opinion No. 145 (December 14, 1946), 67 PUR NS 161, 167, 175. See also Commis-

sioner Olds' separate concurring opinion therein, in which it was pointed out that "The Commission would be blind to its obligations if, in fixing rates for the future, it used experience in the past which it has every reason to believe will not be repeated. . . . We already know the changes which have occurred between the test years, 1942-1943 and 1945, and the prospective accentuation of those changes. Hence, we would be dealing with fiction if we were to use the experience of 1945 . . . as the sole test of just and reasonable rates for the future."

PITTSBURGH v. PITTSBURGH & WEST VIRGINIA GAS CO.

While concurring fully in the majority opinion and participating therein, I feel it necessary to make this additional statement to clarify the record.

The minority opinion completely misinterprets the significance of this case, suggesting that our action amounts to no more than the making of intercompany adjustments and that it will have no effect upon consumer rates of the Pittsburgh area. Actually the case was initiated because the Equitable Gas Company had filed with the Pennsylvania Public Utility Commission a schedule of increased consumer rates for the Pittsburgh area. The city of Pittsburgh thereupon filed a complaint with this Commission averring, among other things, that a substantial part of the operating expenses of Equitable Gas Company consists of the cost of natural gas purchased from Pittsburgh and West Virginia Gas Company and that the reasonableness of the charge for such natural gas should be determined by the Federal Power Commission.

Where the reasonableness of a rate is complained of, as here, it is our duty under the Natural Gas Act to investigate the matter and to make findings in respect thereto, and further, to order changes in such rates when they are found to be unjust, unreasonable, and unduly discriminatory or preferential. This we have done.

In so doing we believe our efforts will be of assistance to the city of Pittsburgh and the Pennsylvania Public Utility Commission for they are advised, through our action, that the rates charged Equitable by Pittsburgh are just and reasonable and that Kentucky's earnings have been reduced to a reasonable level. These facts will

doubtless be given due consideration in any determination which the state Commission may find necessary with respect to the rates charged Equitable's consumers. Indeed what we have done here is the very essence of Federal regulation complementing state regulation in an area where state authority may not operate, and is contemplated by the Natural Gas Act.

Apparently the minority feels that the Commission need take no final action on complaints unless such action would have an immediate effect upon consumer rates, but their dissenting opinion is barren of any suggestion that the complaint be dismissed. What disposition is to be made of the case from the minority's point of view remains a mystery. The majority view is that all parties to a proceeding are entitled to a decision by the Commission on the issues involved.

The minority's implication that the operating results shown by the record do not reflect conditions comparable to those existing in 1948 is erroneous. This is clear from the statement of justification filed by Kentucky on February 20, 1948, in support of new rate schedules covering sale of natural gas for resale to Pittsburgh and Louisville Gas & Electric Company, to supersede the rate schedules involved in Dockets Nos. G-627 and G-635. In that statement Kentucky stated that the data required to justify such increases in rates were contained in the record in the rate proceeding pending before the Commission in these dockets. Thus Kentucky itself relied upon the record herein to support a change in rates filed in 1948. Significantly the company did not request that that rate proceeding be reopened.

FEDERAL POWER COMMISSION

The minority's inconclusive emphasis on the lapse of time since the record was closed is interesting from a psychological standpoint, for the delay in disposing of this case was of their making. The case, which was supervised by Commissioner Smith, was argued orally before the Commission on April 9, 1947, after briefs and reply briefs had been filed. Thereafter, on May 15, 1947, the examiner filed his advisory report and on September 18, 1947, the Commission agreed unanimously that the case should be decided in accordance with that report, which followed the principles of rate making to which the Commission has consistently adhered.

The examiner was instructed to prepare the necessary opinion, which was distributed to the Commission on October 20, 1947. But by that time the minority had decided to renounce the cost basis for gas produced by a natural gas company and to accept the gas industry's theme that such gas should be valued as a commodity. As pointed out in the majority opinion, this would have had the effect of upholding substantially the claim of the two gas companies for the "commodity value" of the gas they produce, thereby making possible an increase in rates to the consumers of Pittsburgh. From then on it was impossible to get action until the Commission had a full complement of five members.

The minority's reference to counsel's stipulation "waiving the troublesome question of cost allocation," and their attempt to employ this as affording a basis for inability to concur in the re-

duction of rates to Louisville, is both misleading and difficult to understand because:

(1) The nonjurisdictional business, to which the waiver in the respondents' stipulation ran, involved only an inconsequential amount of direct consumer sales and did not involve Kentucky's sales to Louisville, which respondent accepted as jurisdictional.

(2) The minority's position is at complete variance with the Commission's consistent policy on this issue. If followed, it would partially reopen the gap in regulation which Federal legislation was designed to close.

(3) In order to throw doubt on the Commission's jurisdiction over such sales, the minority found it necessary to go outside the record while, at the same time, conceding that the facts on which they rely are not adequate for a final determination of the question.

(4) The stipulation waiving all jurisdictional questions was entered into by Commission counsel only after such stipulation had been submitted to and approved by the entire Commission, including the minority, on the basis of a memorandum of May 15, 1946, from Supervising Commissioner Smith recommending such action.

The attempt of the minority to justify its position by pursuing side issues, instead of coming to grips with the real issue, i. e., the treatment of field prices, can only serve to reintroduce into the regulatory process some of the confusion which progressive commissions have been working to eliminate during the past ten to fifteen years.

IDAHO PUBLIC UTILITIES COMMISSION

Re J. H. Harper et al.

Case No. F-1394, Order No. 1962

August 25, 1948

INVESTIGATION based upon complaint against the commercial rates and service of an electric corporation; new rates prescribed.

Return, § 6 — Basis — Capital invested.

1. The rates of a utility are based on its earnings in relation to the capital invested in the plant devoted to the public, p. 88.

Return, § 87 — Electric company.

2. Earnings of 5.44 per cent were not regarded as unreasonable for a small electric company, p. 88.

By the COMMISSION: On April 12, 1948, sixty-one business men residing in the towns of Driggs, Victor, and Teton, Teton county, Idaho, who are patrons of The Teton Valley Power & Milling Co., a corporation, and using electrical energy supplied by that utility for power, lighting, refrigeration, and other purposes, filed with this Commission a petition alleging, among other things, their dissatisfaction with the commercial rates charged by said corporation and complaining about the efficiency of the service.

After receiving said petition, this Commission on the 20th day of April, 1948, ordered that a public hearing be held on the above-entitled case. The hearing was set for the district court room, Driggs, Idaho, on Tuesday, the 25th day of May, 1948, at 10 o'clock A. M., at which time and place the hearing was held and the following appearances were entered:

F. C. Gillette, Victor, appearing for applicants; J. H. Harper, Driggs, appearing for applicant; J. N. Jeppeson, Driggs, appearing for Teton Valley Power & Milling Company, intervenor; R. E. Larsen, Boise, appearing for the Public Utilities Commission.

1. That the Teton Valley Power and Milling Company is a corporation organized and existing under and by virtue of the laws of the state of Idaho, with its principal place of business at Driggs, Teton county, Idaho, which said corporation is operating in the state of Idaho as a public utility corporation.

2. That the Teton Valley Power and Milling Company owns and operates as a public utility, a hydroelectric plant for the purpose of generating electricity and selling electrical energy for light, power, heating, cooking, and other purposes to residents of the towns of Driggs, Victor, and Teton,

IDAHO PUBLIC UTILITIES COMMISSION

Teton county, Idaho. That this company also owns and operates a milling and merchandising business in Driggs, Teton county, Idaho.

3. That the Teton Valley Power and Milling Company does now maintain and has for the past several years maintained an accounting procedure which separates the accounts of the electrical, merchandising, and milling business and in no case is the revenue or the expense of one intermingled with the other. The utility carefully maintains a complete set of books for the electric utility and all prescribed accounts are included.

4. That the Teton Valley Power and Milling Company for seven months of every year faces unusually difficult problems in the maintenance of transmission lines and operation of generating plant. The winters are severe and the deep snow precludes the use of conventional methods of transportation for locating and repairing trouble always encountered in maintaining a transmission system. The utility owns and operates a hydroelectric generating station on the Teton river some 12 miles from the village of Felt, Idaho, and in very cold weather it is possible for ice to force the shutdown of this plant, thus interrupting the service.

There was much testimony introduced about the variation in the voltage of the system. This Commission has examined the records of the volt meters and can find no evidence of serious variations of voltage, but granting that this situation can exist, it is of the opinion that with the installation of larger transformers this condition will be remedied.

5. That the utility has for several

years maintained several different rate schedules for the use of its commercial customers, these different rate schedules resulting in the customer having to accept service through more than one point of delivery. Thus the customer is prohibited from advantages of lowering steps of the rate schedule and his usage charges increase due to each of his several services being on a separate meter. This has resulted in a disadvantage to the utility as well as to the customer, the utility requiring additional investment in meters with added cost of meter reading and the increased possibility of error in the calculations on the bills. The customer has the added maintenance of the additional wiring. By this order, the Commission is endeavoring to correct this situation by adjustment.

[1, 2] 6. That the Teton Valley Power and Milling Company does maintain slightly higher rates than those of other private utilities operating in the same vicinity; such is not an unusual condition; it is not possible for a small electric utility to operate in a territory where the possibility of the volume of sales is restricted to certain definite limits to furnish service within the same rate range of a much larger utility. The rates of a utility are based on its earnings in relation to the capital invested in the plant devoted to the public. The earnings of the Teton Valley Power and Milling Company for 1946 was 4.75 per cent and for 1947 5.44 per cent—the Commission does not regard this as unreasonable in consideration of the size of the utility and the amount of net profit that it realizes. If the earnings were to become greater than these percentages, the Commission could be justi-

RE HARPER

fied in ordering a rate reduction to reduce any excess earning that would be involved.

After due consideration of the evidence submitted the Commission now makes the following order:

ORDER

It is therefore *ordered*, that The Teton Valley Power and Milling Company cancel out Schedule A-2 and Schedule A-5 and make effective the following schedule of rates for its commercial customers:

Commercial Service

Available—In all territory served by the company.

Applicable—To commercial service supplied for lighting, refrigeration, and small power purposes where all service taken on the premises is supplied under this schedule and through one kilowatt-hour meter.

This schedule does not apply to water heating and power in excess of three horsepower of installed load.

Monthly Rate:

8¢ for the first 100 kw. hr.
5¢ for the next 300 " "
4¢ for the next 600 " "
2¢ for all over 1000 " "

Monthly Minimum Charge \$1.00

Monthly Minimum Charge for Three
Phase Service \$5.00

It is *further ordered*, that the adjusted rates shall become effective upon completion of the change over to one kilowatt-hour meter service. But the Teton Valley Power and Milling Company shall complete all changes under this rate as soon as practicable and not later than one year from the date of this order.

It is *further ordered*, that in all other respects the petition of the applicants be, and the same is hereby denied.

NEW YORK PUBLIC SERVICE COMMISSION

Re Westchester Street Transportation Company, Incorporated

Case 14003

October 28, 1948

APPPLICATION of transportation company for authority to loan money to affiliate and application of affiliate to borrow; approved subject to conditions.

Intercorporate relations, § 19 — Loans between affiliated transportation companies — Consideration of wage claims.

1. Wage claims of transportation company employees should be given consideration by the Commission in considering an application for permission to loan a sum of money to an affiliated company, p. 90.

Intercorporate relations, § 19 — Loans between affiliated companies — Possibility of repayment.

2. The most serious consideration on a hearing on an application by a transportation company for authority to loan a large sum of money to an affiliate is whether there is any prospect that the affiliate will repay the loan, p. 90.

NEW YORK PUBLIC SERVICE COMMISSION

Intercorporate relations, § 19 — Loans between affiliates.

3. Except for cogent reasons, applications of utilities for authority to loan money, brought under § 107 of the Public Service Law, which was enacted to prevent abuses of the holding company system such as the payment of funds under the guise of loans between subsidiaries and affiliates, should not be granted, p. 91.

Intercorporate relations, § 19 — Loans between affiliates — Transportation companies — Safeguards.

4. A loan of a large sum of money from a transportation company to an affiliated company with a bad credit record and history of improvident declarations of dividends, to pay the affiliate's wage claims, must be safeguarded to insure repayment and to insure that the money in the hands of the affiliate will be used to pay wage claims, p. 92.

Rates, § 153 — Intercorporate relations as a factor — Dissipation of assets.

5. A request by a subsidiary transportation company for a rate increase will not be given serious consideration where the company has gotten itself into serious financial difficulties by dissipating its assets in the form of dividends to a holding company instead of providing for its creditors, p. 92.

APPEARANCES: Sherman C. Ward, Acting Counsel (Raymond J. McVeigh, Assistant Counsel), for the Public Service Commission; Gordon, Brady, Caffrey, and Keller (by Mortimer S. Gordon, Stuart Riedel, Addison B. Scoville, and David C. Keane, Jr.) New York, for Westchester Street Transportation Company, Inc., and Surface Transportation Corporation of New York; John P. McGrath, Corporation Counsel (by G. Gary Sousa, Assistant Corporation Counsel), New York, for the city of New York.

By the COMMISSION: After several changes in the original request, Westchester Street Transportation Company, Inc., asks authority to loan to Surface Transportation Company of New York, and Surface asks permission to borrow, the sum of \$150,000. Both Surface and Westchester are owned by Third Avenue Transit Corporation and hence are under common control. The avowed purpose of the loan is to permit Surface to pay cer-

tain claims of its employees for back pay. The total amount claimed, as charged on Surface's books, is something in excess of \$625,000. To meet that obligation and many others, Surface had \$114,625.05 in cash as of October 20, 1948. As of the same date, Westchester had \$391,266.11.

From the standpoint of Surface, the evidence is clear that it needs the money. The principal question is, therefore, whether Westchester can spare the money and whether there is any reasonable assurance that it will be repaid.

[1] Westchester too has certain obligations to its men—wage claims—charged on its books in excess of \$50,000. Clearly it would be unfair to the employees of Westchester to be denied the amount due them for the purpose of paying the employees of some other line, and in determining the amount which is available, these wage claims should be considered.

[2] The most serious question of all, however, is: Is there any prospect

RE WESTCHESTER STREET TRANSP. CO.

that Surface will ever repay the loan?

[3] The application is made under § 107 of the Public Service Law which was enacted in part to prevent the abuses of the holding company system such as the payment of funds under the guise of loans between subsidiaries and affiliates. Except for cogent reasons, applications under this section should not be granted.

The proposal before us is for a demand note without interest. The officers who testified would not even offer to make a guess when the loan might be repaid. Under these circumstances, unless the closest safeguards are annexed to the loan, this Commission would have no option but to deny it.

Past history shows that no reliance can be placed upon declared good intentions of Surface to repay the loan. As late as 1946 in P.S.C. Cases 12287 and 12288, the officers of Surface and Westchester in applications for loans testified that the company's cash then on hand was required for capital purposes and would be conserved for such use and not dissipated in dividend payments. Notwithstanding that fact, the present management, almost immediately after assuming control, caused Westchester to pay dividends of \$553,000 and Surface \$412,500 from June 30, 1947, to June 24, 1948, or nearly a million dollars in all to the parent, Third Avenue. One such payment was made after May 1, 1948, the date of the wage agreement with the men. Six hundred eighty-five thousand five hundred dollars (\$685,500) of dividend payments were made after the expiration of the prior union contract and at a time that the management of

the petitioners knew that the union was pressing for increased wages and additional benefits. Under these circumstances, irrespective of the rights of the men to receive the pay which has been promised them, the claims of the men should not be used as an opportunity for the further diversion of funds to Third Avenue, and the moneys asked for to pay the men should not by some legerdemain find themselves in the treasury of Third Avenue.

It should be noted that the dividends paid by these two companies in twelve months are more than double all of the dividends of the companies for the years 1943, 1944, 1945, and 1946 put together, during which period it is common knowledge that the bus business was more prosperous than it is now.

There was another payment, which is a small thing of itself, but indicative of the company's attitude. During the past month of September, Surface reduced its indebtedness to its associated companies, principally Third Avenue, by more than \$70,000. This was at the very time when its cash was declining and when it was faced with the necessity of meeting its back wage claims.

Even if we can close our eyes to the history of the immediate past and assume that the management would not again change and would do its utmost to see that Westchester was repaid, there is still a further consideration. As of September 30, 1948, exclusive of any back payments due its men, Surface owed in current liabilities \$2,725,821.10. Its earned surplus account was a deficit. In its present situation the possibility that Surface

NEW YORK PUBLIC SERVICE COMMISSION

may not meet its maturing obligations must be considered. The prospect is sufficiently real to require that we should protect Westchester assets for the benefit of Westchester creditors, customers and employees, rather than have such assets diverted to the creditors of Surface or Third Avenue.

[4] It follows then that if the loan is granted, it must be safeguarded to insure the return of the money to Westchester and to insure that the money in the hands of Surface will be used to pay wage claims, those safeguards to apply until the loan is repaid:

(1) Westchester, before making the loan, should set aside in a special fund at least \$50,000 to be used to pay back wage claims to its men.

(2) The receipts from the loan should be used by Surface for no other purpose than the payments of its past due wage claims or the repayment of the loan to Westchester.

(3) The note should be for a definite period of six months and should not be extended without the approval of the Commission.

(4) Surface should undertake by appropriate corporate action to make no payments whatsoever to its parent, Third Avenue, except in the regular course of business for services or materials furnished, after the date of this order and, of course, should pay no dividends until the loan is repaid.

(5) Third Avenue should agree to subordinate the present indebtedness of Surface to Third Avenue to the indebtedness of Surface to Westchester.

Discussion:

We are faced by a condition where, by reason of improvident declaration of

dividends, made after a sworn commitment that they would not be made, the treasury of Surface has been impoverished.

Surface claims that its only means of meeting its obligations is an increase in fare. But beyond general statements as to loss upon the hearing in this case, the company was unable or unwilling to present any concrete figures showing what its actual operations had been since the introduction of the 6-cent fare.

[5] It should be pointed out that no company has the legal right nor any claim based upon any moral consideration to burden future riders because of past derelictions. Instead of providing for its creditors, it saw fit to dissipate its assets in the form of dividends to a holding company.

The conditions attached to the proposed loan may seem harsh but they are necessary. If the company can propose any other plan which will assure the protection of Westchester and wage claimants, the Commission will entertain it. However, with the picture as it is, a receivership of the Third Avenue System is not an impossibility; and under these circumstances, we owe it to the patrons and the employees of Westchester to see that that company is protected to the maximum.

It will not do to rob Peter to pay Paul.

Under the plea that it is for the benefit of the employees of Surface we cannot permit ourselves to be hoodwinked into any plan which, in the last analysis, may result in the enrichment of the treasury of Third Avenue.

RE WESTCHESTER STREET TRANSP. CO.

Conclusion and Recommendation:

Provided the safeguards which we have prescribed above surround the

loan, we approve it. Otherwise, we would have no recourse but to deny it. An appropriate order is adopted.

NORTH CAROLINA UTILITIES COMMISSION

Re Goldsboro Gas Company

Docket No. 4398
November 19, 1948

ORDER by Commission requiring gas company to show cause why plant should not be improved and rates revised; show cause order satisfied.

Discrimination, § 39 — Rates — Service at less than cost.

The Commission is strongly opposed to any class or group of customers receiving service at less than actual cost for the reason that when any customer pays less than it costs the utility to provide service, other customers are required to pay more than they should pay to subsidize the preferred customers.

APPEARANCES: For the respondent: W. F. Taylor, Goldsboro, for the Goldsboro Gas Company.

For the protestants: James D. Evans, Goldsboro, for General Electric Company; Scott B. Berkeley, Goldsboro, as an observer for the city of Goldsboro; James W. Butler, Goldsboro, for the Goldsboro Chamber of Commerce and the Merchants Association, Inc.; A. B. Sansbury, Goldsboro, for the city of Goldsboro.

By the COMMISSION: This cause comes before the Commission on its own motion ordering the Goldsboro Gas Company to appear before the Commission on Friday, June 11, 1948, and show cause, if any it had, why its plant should not be improved

and why its rates should not be revised.

The company appeared before the Commission as directed and after a brief consultation the Commission issued the following order:

"This case was called for hearing on Friday, June 11, 1948, and it was made to appear to the Commission that the gas company was willing and had been willing to cooperate with the Commission in working out a new schedule of rates provided said new schedule did not reduce the gross income of the company; and the company asks that they be given an opportunity to confer with the rate department of the Commission to that end before final action was taken in this proceeding.

"Whereupon, the case was post-

NORTH CAROLINA UTILITIES COMMISSION

poned indefinitely until said conference could be consummated and a report made as to the outcome."

In accordance with the above order the Goldsboro Gas Company made a customer study, revised its rates, and then conferred with the Commission's rate department concerning said revised rates. The rate department was of the opinion that the revised rates as proposed would not reduce the company's gross revenue, provided the cubic feet sales did not decline. Whereupon the proposed revised rates were properly advertised and the case was heard before the full Commission on October 14, 1948.

The company's proposed rates consisted of Schedule No. 1 and Schedule No. 2. Schedule No. 2 would be applicable to all customers using two or more major appliances. Schedule No. 1 would be applicable to all customers not served under Schedule No. 2.

The witness for the company stated that in its eighteen months of operation the company has lost \$20,612.05, which includes the cost of conversion to propane air; that for the first seven months of this year the operating loss was approximately \$2,041.78; that the price of propane has increased from $2\frac{1}{2}$ to $6\frac{3}{8}$ cents per gallon and that freight rates have risen 50 per cent; that the total cost of furnishing 1,000 cubic feet of gas is approximately \$1.07; that the proposed revised rates would reduce the bills of 33 customers, would not affect the bills of 207 customers, and would increase the bills of 722 customers, including 31 who have been buying gas well below cost; that it is estimated the proposed rates would produce gross revenue of approximately \$9,000 annually; and that

the company has reduced its unaccounted-for gas losses from $34\frac{1}{2}$ to 21 per cent.

The protestants took the position that Rate Schedule No. 2 was unfavorable to large users since all consumption in excess of 10,000 cubic feet would be billed at a straight rate of one dollar per thousand cubic feet and, as such, would not offer any incentive for industrial expansion in the city of Goldsboro.

While the Commission can appreciate the position taken by the protestants, at the same time the Commission is strongly opposed to any class or group of customers receiving service at less than the actual cost of furnishing same for the reason that when any customer of any public utility pays less than it costs the utility to provide the service other customers are required to pay more than they should pay to subsidize the other customers.

From the testimony in the case and from other pertinent information available to the Commission, the Commission finds that the company has shown that considerable progress has been made in the improvement of its plant and in the reduction of its unaccounted-for gas losses; that the proposed rates are comparable to those now in effect by similar companies; that the proposed rates are fair and reasonable; that the company has satisfied the Commission's show cause order.

Wherefore, it is *ordered* that proposed Rate Schedules No. 1 and No. 2, of which copies are hereto attached, be and the same are hereby authorized and approved.

It is *further ordered* that the rates herein approved shall become effective

RE GOLDSBORO GAS CO.

on all billings on and after December 1, 1948, and shall supersede all existing rates of the company now in effect.

UNITED STATES COURT OF APPEALS, DISTRICT OF COLUMBIA
CIRCUIT

Capital Airlines, Incorporated

v.

Civil Aeronautics Board

No. 9870

— US App DC —, — F2d —
December 6, 1948

PETITION for review of order of Civil Aeronautics Board dismissing petition of air carrier for retroactive increase rates for mail transportation; dismissed.

Rates, § 13.5 — Powers of Civil Aeronautics Board — Revision of air-mail rates retroactively.

The Civil Aeronautics Board does not have power to revise retroactively rates for air transportation of mail which have been unchallenged for more than three years.

Rates, § 3 — Constitutional requirements — Power to increase rates retroactively — Confiscation.

Statement that the power to increase retroactively established rates which have prevailed unchallenged is not needed by the Civil Aeronautics Board to vindicate the constitutional requirement of the Fifth Amendment for just compensation, or to fulfil any contractual obligation of the government to the air lines, p. 96.

APPEARANCES: Charles H. Murchison of the Bar of the State of Florida, pro hac vice, by special leave of court, with whom Robert B. Hankins was on the brief, for petitioner; William C. Burt, Chief, Rates Section, Civil Aeronautics Board, with whom Herbert A. Bergson, Assistant Attorney General, George Morris Fay, United States Attorney, Emory T. Nunneley,

Jr., General Counsel, Civil Aeronautics Board, Warren L. Sharfman, Attorney, Civil Aeronautics Board, and Oliver Carter, Acting Chief, Enforcement and Litigation Section, Civil Aeronautics Board, were on the brief, for respondent; Louis P. Sissman, Attorney, Civil Aeronautics Board, also entered an appearance for respondent.

UNITED STATES COURT OF APPEALS

Before Prettyman and Proctor, JJ., and McGuire, DJ., sitting by designation.

PROCTOR, J.: This case is here for review of an order of the Civil Aeronautics Board of December 2, 1947 (confirmed by its order of March 29, 1948) dismissing a petition of Capital Airlines, filed January 14, 1947, in so far as it sought retroactive increase in mail rates fixed by the Board's order of December 16, 1942, effective as of June 1, 1942, "with the understanding that upon respondent's request filed pursuant to rule 8 of the Rules of Practice, they" (the rates) "will be subject to reconsideration from and after that date."

We disagree with the contentions of petitioner, and hold:

1. The order of December 16, 1942, fixed a final mail rate, subject only to reconsideration if requested within fifteen days as provided by rule 8. An examination of the proceeding leads clearly to this conclusion.

2. The right to reconsideration was lost by failure to apply therefor within the given time.

3. In view of the finality of the rates, which stood unchallenged for more than three years, the Board was without power to revise them retroactively. *Transcontinental & Western Air v. Civil Aeronautics Board*

(1948) — US App DC —, 76 PUR NS —, 169 F2d 893.

4. The power to increase retroactively established rates which have prevailed unchallenged is not needed to vindicate the constitutional requirement for just compensation (Fifth Amendment), or to fulfil any contractual obligation of the government to the air lines. The Civil Aeronautics Act, under which Capital chose to operate, embodies a scheme of just compensation for services rendered to the government by requiring that fair and reasonable rates be fixed from time to time for carrying of the mail (§ 406(a)). This right is protected by the privilege accorded carriers to apply at any time for higher rates to compensate for future service to the government. The act, with its regulatory provisions, is not intended to underwrite profitable operation of a carrier's business, any more than statutes imposing regulation of public utilities are intended to insure them a net revenue. *Federal Power Commission v. Natural Gas Pipeline Co.* (1942) 315 US 575, 590, 86 L ed 1037, 42 PUR NS 129, 62 S Ct 736, and cases cited.

We think the Board was right in dismissing the petition of January 14, 1947, in so far as it requested retroactive increase in mail rates.

Accordingly the petition for review of that order is dismissed.



Industrial Progress

A digest of information on new construction by privately managed utilities; similar information relating to government owned utilities; news concerning products, supplies and services offered by manufacturers; also notices of changes in personnel.



\$52,000,000 Program Announced By Kansas City Pwr. & Lt.

WITH a construction budget of \$52,000,000 for the next three years, Kansas City Power & Light Company has announced plans for building a 132,000-kilowatt steam-electric generating station. To cost an estimated \$27,000,000, the new plant will add more than 800 million kilowatt hours a year to the electric power supply of the Kansas City area, according to Harry B. Munsell, president. The total nameplate generating capacity of the company's plants will be increased by more than 40 per cent.

Ebasco Services, Inc., New York engineering firm has been employed to direct the design, engineering, and construction of the new power plant.

Other important items in the three-year program include: completion of a new boiler and installation of a new 12,500-kilowatt turbogenerator at Northeast Station; completion of a new boiler and installation of an 11,500-kilowatt turbogenerator at Grand Avenue Station; continuation of the Kansas City street lighting modernization program; extension of overhead and underground lines; and addition and replacement of transformers and other equipment.

Exide Announces Manchex Storage Battery

EMBODYING a number of exclusive improvements in storage battery design, a new battery known as the Exide-Manchex is announced by The Electric Storage Battery Company, Philadelphia.

This new product of Exide is of the sealed glass jar type and applicable to all types of stationary power in electric utilities, railway signaling, telephone, emergency power and lighting, rural electrification, and other general applications where exceptionally long battery life is desired.

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in the grid. Naturally, this form of active material does not wash away and is an important reason for the unusually long life of the manchester plate.

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An illustrated catalog can be obtained by writing to The Electric Storage Battery Company, 19th street and Allegheny avenue, Philadelphia 32, and asking for Form 4852.

Cambridge Perfects New Style Tile Numbers and Letters

ENGINEERS of The Cambridge Tile Mfg. Company, Cincinnati 15, Ohio, announce production of the new Cambridge tile numbers and letters has been perfected.

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Royalty Rates Set on Pipe System Gas Storage

D. V. MEILLER and M. G. MARKLE, who are associated with the Public Service Company of Northern Illinois in gas engineering work and who invented a system for the underground storage of natural gas under high pressure, recently announced the adoption of a policy which will make available to any prospective user of the system a license under their patent rights at a low uniform royalty rate.

The royalty basis will be 60 cents per thousand cubic feet of gas storage capacity.

Licenses, they said, will be granted to any responsible parties who wish to install or have installed a high pressure gas storage system covered by their pending patent application.

The underground gas storage system developed by Meiller and Markle already has been used successfully in installations having a capacity of more than 95,000,000 cubic feet of natural gas.

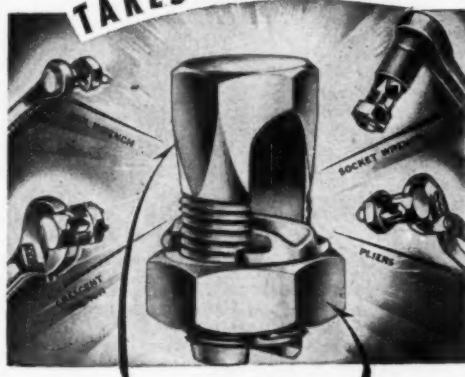
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mands for natural gas, the Meiller-Markle high pressure, underground storage system, described in detail in our October 7, 1948, issue, has recently attracted considerable attention from utility companies and manufacturers interested in the storage of natural gas for reserve or emergency supplies.

Multichannel Microwave Radio Link Developed by Federal Tel.

A MULTICHANNEL FM microwave radio link, known as "Intelink," capable of simultaneously transmitting more than 7 two-way telephone conversations, has been developed by Federal Telephone and Radio Corporation, Clifton, New Jersey, manufacturing associate of International Telephone and Telegraph Corporation. Combining highly reliable communications with small size, and low initial and operating costs, this FTL-13-A "Intelink" should find wide application in telephone companies, railroads, public networks, oil lines, mining companies, and similar organizations.

Operating in the frequency range of 900 to 940 megacycles, this link meets all the standard requirements of a wire transmission system. Each radio system, comprising one radio transmitter and one radio receiver terminal requiring a single assigned carrier frequency, constitutes a one-way broad band communications circuit. Two such links, operating in opposite directions over the same path on two separate radio carrier frequencies, provide a two-way circuit adaptable to signal transmission on a 4-wire basis.

8,000 Vehicles Added to Nation's Transit System During 1948

MORE than 8,000 new vehicles worth \$155,000,000 were added to the nation's transit systems during 1948 to replace worn out equipment and to supply service on new routes, according to figures released by the American Transit Association.

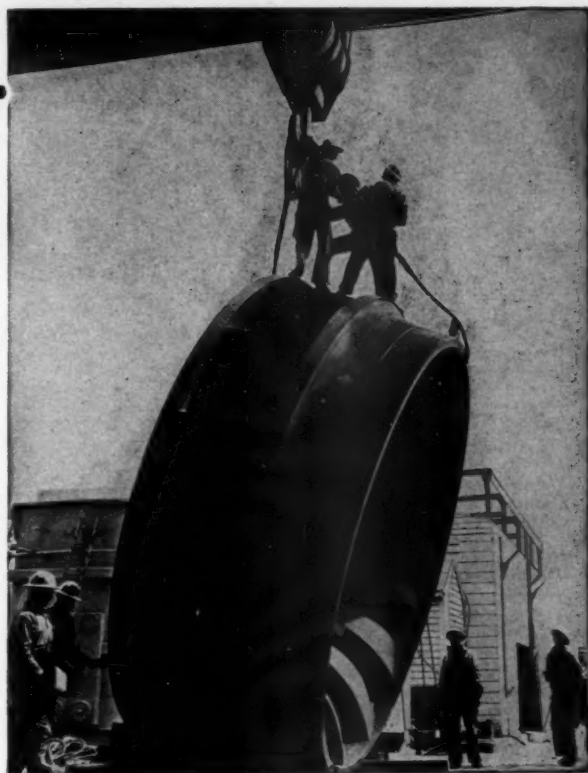
Vehicles owned by the industry are estimated at 91,700, a small drop from the 92,407 at the end of 1947, but seating capacity is greater due to replacement vehicles being larger.

There was a 41 per cent increase in electric trolley coach deliveries in 1948 over 1947, a decrease of 20 per cent in streetcars for the same period and a drop of 42 per cent in deliveries of gas and diesel buses. However, net increase of vehicles in each category was trolley coaches 30 per cent, streetcars 16 per cent, and buses 12 per cent.

During the past year public transit vehicles carried over 21 billion passengers a total of 3.3 billion miles more than all other forms of transportation combined.

Indications for 1949 point to a further decline in deliveries of streetcars, gas and diesel buses, according to manufacturers, but the backlog of orders for electric trolley coaches continues strong and it is possible that deliveries for 1949 will equal 1948, largest in trolley coach history. Many cities now op-

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erate, or have on order, more than 200 trolley coaches. These include San Francisco with more than 400 planned; Atlanta, 433 operating and on order; Milwaukee, 400; Chicago, 362; Providence, 331; Cleveland, 329; Boston, 315; Seattle, 307; Indianapolis, 202 and Brooklyn, 200. Preliminary surveys indicate that trolley coaches now serve 81 cities with a population of more than 10,000.

New Line of Automatic Floating Battery Chargers Announced

DEVELOPMENT of a new line of electronically controlled and regulated floating battery chargers, for power stations, communications, and other applications requiring accurate control of floating voltage, has recently been announced by Power Equipment Company, 55 Antoinette street, Detroit 2, Michigan. Similar equipment utilizing magnetic controls has also been developed. The company has specialized in the design and manufacture of custom built controlled rectifiers since 1935.

The new standard chargers are fully automatic in operation, have constant potential output, and are designed to maintain floating charge on the battery group to within 1%. This close control of floating voltage, in accordance to battery manufacturers' recommendations, is considered an important factor in determining battery life in as much as it eliminates the deteriorating effects of over- or under-charging. Further, the need for addition of water is reduced to about twice a year due to the elimination of excessive gassing. The combination of these factors results in lower maintenance and supervisory cost as well as increased battery life, according to the manufacturer.

Bangor Hydro-Electric to Spend \$3,000,000 During 1949

To meet growing demand for service Bangor Hydro-Electric Company will spend \$3,000,000 during 1949 on new facilities, according to a recent announcement.

Rural customers are being put on the line as rapidly as possible. About 150 miles of lines were installed during 1948 and a like amount is planned for 1949.

Disc Edison Voicewriter Offered By Thos. A. Edison, Inc.

A NEW dictating instrument, the Disc Edison Voicewriter, combining maximum convenience with Edison's exclusive "Ear-Tuned Jewel-Action" or diction control has been announced by Thomas A. Edison, Inc., West Orange, New Jersey. Its seven-inch vinylite plastic disc records 30 minutes of dictation and is light enough to mail for 3 cents.

To put a disc on it is only necessary to flip open the cover, slip in the disc and close the cover. The operation can be done easily with one hand since the record is automatically positioned.

The discs can be erased by spinning at high temperatures. A special erasing service is to

be offered users so that the cost of discs will average only 6 cents.

"Ear-Tuned Jewel-Action" or diction control is accomplished by a special electronic circuit that makes the speaker's voice more understandable. Hard-to-hear sounds like the "d" in "clocked" or the "z" and "th" in "zither" are brought out more distinctly. In a unique demonstration, the new Voicewriter can split the word "lips" so that the last sound heard when it stops is "li" and the first sound when it starts is "ps." The importance of this is apparent when one recalls the effect of starting an ordinary phonograph with the needle down on the record.

To protect the dictator against "dry runs," an all purpose warning light blinks if no disc is in the Voicewriter, if the cover is not down so that the disc is firmly held, or if the instrument is not set on dictation. An accurate locating pointer enables the dictator to find his place quickly and makes for exact spacing between letters to avoid waste or overlapping.

Wisconsin Pwr. & Lt. Plans 7-Year Expansion Program

THE WISCONSIN POWER AND LIGHT COMPANY will spend about \$42,000,000 for new property during the next seven years, according to Grover C. Neff, president.

In line with the company's expansion program, a new, 25,000-kilowatt generating unit has been installed at Beloit and additional generators will be added to the company system during the next three years. Two hydro-electric generating stations are being built on the Wisconsin river north of the company's Wisconsin Dells plant. A 15,000-kilowatt station at Castle Rock will be completed by the summer of 1950, and a new 60,000 kilowatt unit has been ordered for the Edgewater plant.

Duquesne Light's \$80,000,000 Program Well Under Way

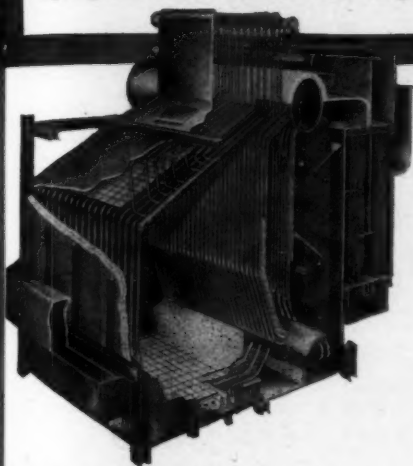
THE \$80,000,000 expansion program of Duquesne Light Company was advanced considerably during 1948. Almost \$14,000,000 was spent on modernization and expansion. Work was continued on two new 81,000 kilowatt generators being installed at Phillips power station on the Ohio River. The first of these units will go into service in September and the second is expected to be ready a year later. While the work at the Phillips station is the largest project, other additions and improvements were made on Duquesne Light's system.

While the actual construction budget for 1949 has not yet been determined, it is expected that Duquesne Light's expansion program will be accelerated. In addition to the 81,000 kilowatts to be placed in service at Phillips, twenty-one 4,000-volt substations are scheduled for installation in residential and commercial areas to meet the expected continuing load growth during the year. Additional transmission lines will be installed and other general system improvements, additions, and expansions will be made during the year.

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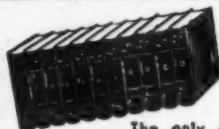
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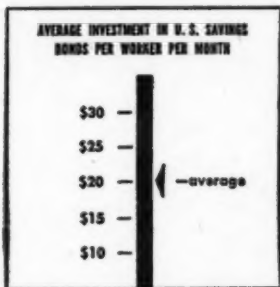
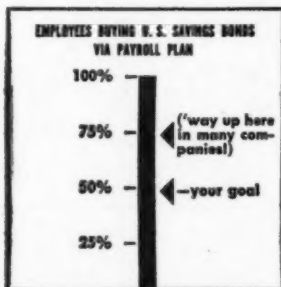
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INDEX TO ADVERTISERS

[The Fortnightly lists below the advertisers in this issue for ready reference. Their products and services cover a wide range of utility needs.]

A

Albright & Friel, Inc., Engineers 35
American Appraisal Company, The 32

B

*Babcock & Wilcox Company, The
Barber Gas Burner Company, The .. Inside Front Cover
*Barber-Greene Company
Black & Veatch, Consulting Engineers 35

C

Cambridge Tile Mfg. Co., The 11
Carter, Earl L., Consulting Engineer 35
Cleveland Trencher Co., The 15
Combustion Engineering—Superheater, Inc. 16-17

D

Day & Zimmermann, Inc., Engineers 32
Dodge Division of Chrysler Corp. .. Inside Back Cover

E

Ebasco Services, Incorporated 31
Electric Storage Battery Company, The 18
Electrical Testing Laboratories, Inc. 32

F

Ford, Bacon & Davis, Inc., Engineers 32

G

*Gas Consumers Association
General Electric Company Outside Back Cover
GMC Truck and Coach Division 28
Gilbert Associates, Inc., Engineers 32
Gilman, W. C., & Company, Engineers 35
Grinnell Company, Inc. 29

H

Haberly, Francis S., Consulting Engineer 35
Harris, Frederic R., Inc., Engineers 32
Hankels & McCoy, Contractors 33
Hoosier Engineering Company 33

I

*International Business Machines Corporation ...
International Harvester Company, Inc. 5
Irving Trust Company 4

J

Jackson & Moreland, Engineers 35
Jensen, Bowen & Farrell, Engineers 35

K

King, Dudley F. 28
*Kinsner Manufacturing Company, The 28
Kuljian Corporation, The, Engineers 28

L

Letter, William S., Engineers 28
Lion Uniform Company 18
Loeb and Eames, Engineers 18
Lounge, M. A., & Company 18
Lucas & Luick, Engineers 28

M

Main, Chas. T., Inc., Engineers 18
*Mercold Corporation, The 18
*Merrill Lynch, Pierce, Fenner & Beane 18

N

Newport News Shipbuilding & Dry Dock Co. ... 28
*Norwalk Valve Company 28

P

Penn-Union Electric Corporation 28
Pioneer Service & Engineering Co. 28
Pritchard, J. F., & Company 28

R

Recording & Statistical Corp. 28
Remington Rand, Inc. 28
Robertson, M. H., Company 18

S

Sanderson & Porter, Engineers 28
Sargent & Lundy, Engineers 28
Schulman, A. S., Electric Co., Contractors 28
Sherman, H. B., Mfg. Co. 18
Sloan, Cook & Lewis, Consulting Engineers 18
Smith, Barney & Company 28
Springfield Boiler Co. 28
Standard Research Consultants, Inc. 28

U

United States Testing Co., Inc. 18

W

Westcott & Mapes, Inc. 28
White, J. G., Engineering Corporation, The 28

Professional Directory 32-35

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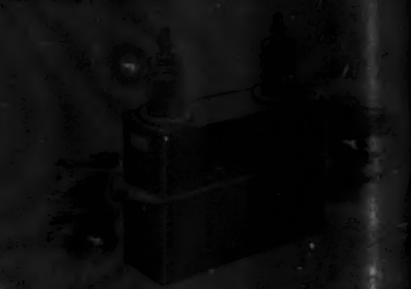
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